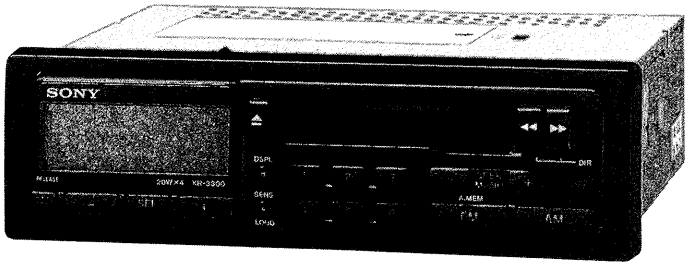
XR-3300

SERVICE MANUAL

E Model
Australian Model



Model Name Using Similar Mechanism	XR-C100
Tape Transport Mechanism Type	MG-36SZ7-32

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.13 % (WRMS)
Frequency response	30 – 15,000 Hz
Signal-to- noise ratio	55 dB

Tuner section

FM

Tuning range	FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108.0 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf (75 ohms)
Selectivity	70 dB at 400 kHz
Signal-to-noise ratio	63 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.4% (mono)
Separation	28 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	5 dB

AM

Tuning range	AM tuning interval: 9 kHz/10kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	35 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	20 W × 4 (at 4 ohms)

General

Output lead	Power antenna relay control lead/Power amplifier control lead
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 × 58 × 170 mm (w/h/d) not incl. projecting parts and controls
Mounting dimension	Approx. 182 × 53 × 153 mm (w/h/d) not incl. projecting parts and controls
Mass	Approx. 1.3 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

使用時は添付資料も参照のこと
Refer to the additional documents.

FM/AM CASSETTE CAR STEREO

SONY®

TABLE OF CONTENTS

1. GENERAL
Button Locations 3
Setting the Clock 3
Cassette Player Operation 3
Radio Reception 4
Other Functions 5
Connections 6

2. DISASSEMBLY
2-1. Cover 8
2-2. Lock Assy 8
2-3. MD Block 9
2-4. Heat Sink 9
2-5. Main Board 10

3. MECHANICAL ADJUSTMENTS 11

4. ELECTRICAL ADJUSTMENTS
Deck Section 11
Tuner Section 12

5. DIAGRAMS
5-1. IC Pin Description 17
5-2. Printed Wiring Boards 20
5-3. Schematic Diagram 23

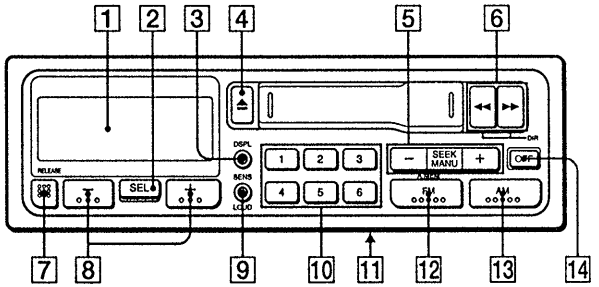
6. EXPLODED VIEWS
6-1. Chassis Section 26
6-2. Front Panel Section 27
6-3. Mechanism Section (1) 28
6-4. Mechanism Section (2) 29

7. ELECTRICAL PARTS LIST 30

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Button Locations



Refer to the pages in ● for details.

1 Display window
2 SEL (control mode select) button ❺❽
3 DSPL (display mode change/time set) button ❺
4 ≜ (eject) button ❺
5 SEEK/MANU button ❻❼
6 ◀◀ • ▶▶ (fast winding)/DIR (tape transport direction change) buttons ❺❻
7 RELEASE (front panel release) button ❹❽
8 (bass/treble/balance/fader control/volume) buttons ❺❽
9 SENS/LOUD (sensitivity adjust/loudness) button ❻❽
10 During radio reception: Preset number buttons ❼
11 Frequency Select switch (located on the bottom of the unit) See "Frequency Select Switch" in the Installation/Connections manual.
12 FM/A.MEM (radio on • band select/automatic memory) button ❺❻❼
13 AM (radio on • band select) button ❺❻❼
14 OFF button ❹

Setting the Clock

The clock has a 12-hour digital indication.

For example, setting it to 10:08

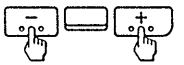
1 Press the FM or AM button to turn on the unit.

2 Display the time.
(Press the DSPL button during unit operation.)

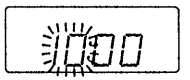
3 Press the DSPL button for more than two seconds.

The hour digits blinks.

Set the hour digits.



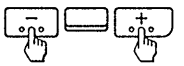
(to go back) (to go forward)



4 Press the SEL button momentarily.

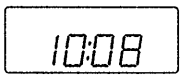
The minute digits blinks.

Set the minute digits.



(to go back) (to go forward)

5 Press the DSPL button momentarily.



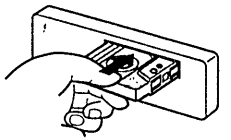
The clock activates.

Note
The clock cannot be set unless the power is turned on. Set the clock after you turn on the radio, or during tape playback.

Cassette Player Operation

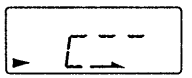
Listening to Tape Playback

After inserting the cassette, playback will start automatically.

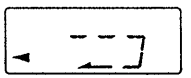


To change the tape direction,
press both the ◀◀ and the ▶▶ buttons at the same time.

Indication of Tape Transport Direction



The side facing up is being played.



The side facing down is being played.

Tape playback automatically changes direction at the end of the tape.

Note
Before turning off the unit, eject the tape to avoid tape damage.

Ejecting the Cassette

Press the ≜ button to stop playback and eject the cassette.

This section is extracted from instruction manual.

Fast-winding the Tape

Direction indicator*	To advance	To rewind
►		
◄		

To resume playback, press the other fast-winding button partially until the locked button is released.

* *The ◄ or ► indicator flashes while fast-winding the tape.*

EN

Radio Reception

Searching for Stations Automatically

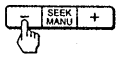
— Automatic Tuning

1 Select the desired band.

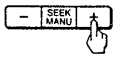
FM I ⟷ FM II

AM

2 Press either side of the SEEK/MANU button momentarily to search for the next station (automatic tuning).



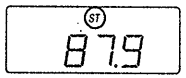
For lower frequencies



For higher frequencies

The scanning stops when a station is received. Press either side of the button repeatedly until the desired station is received.

When an FM stereo program with sufficient signal strength is tuned in,



the "ST" indication appears

To keep the automatic tuning from stopping on stations too frequently (local seek mode), press the LOCAL button momentarily to get the "LCL" indication.
Only the stations with relatively strong signals will be tuned in. The local seek mode functions only when the automatic tuning is in operation.

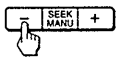
Tuning in by Adjusting the Frequency — Manual Tuning

1 Select the desired band.

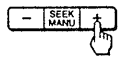
FM I ⟷ FM II

AM

2 Press and hold either side of the SEEK/MANU button.
Release the button when the desired station is received.



For lower frequencies



For higher frequencies

PREVENT ACCIDENTS!
When tuning in during driving, use automatic tuning or the memory preset tuning instead of manual tuning.

Memorizing Stations Automatically

— Automatic Memory Function

Stations with the clearest reception are automatically searched and memorized on each band (FM I, FM II and AM). Up to 6 stations on each band can be stored on the preset number buttons 1 to 6 in the order of band frequency.

1 Select the desired band.

FM I ⟷ FM II

AM

2 Press the FM/A.MEM button for more than two seconds.

The unit starts scanning the selected band and memorize the tuned stations on the preset number button 1 through 6 automatically.

Memorizing Only the Desired Stations

1 Select the desired band.

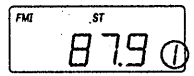
FM I ⟷ FM II

AM

2 Tune in the station which you wish to store on the preset number button.

3 Press and hold the desired preset number button (1 to 6) for about two seconds.

The number of the pressed preset number button appears on the display.



Up to 6 stations on each band (FM I, FM II and AM) can be stored on the preset number buttons in the order of your choice. Therefore, 12 stations can be memorized on FM. If you try to store another station on the same preset number button, the previously stored station is erased.

Receiving the Memorized Stations

1 Select the desired band.

FM I ⟷ FM II

AM

2 Press momentarily the preset number button on which the desired station is stored.

Note
If you press the preset number button for more than two seconds, the currently received station is memorized. To receive the previously memorized station, make sure that the preset number button is pressed only momentarily.

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Other Functions

Adjusting the Sound Characteristics

1 Select the item you want to adjust by pressing the [SEL] button repeatedly.

BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader) → VOL (volume) → BAS (bass)

2 Adjust the selected item by pressing either the [−] or [+] button.

Adjust within three seconds after selecting. (After three seconds the buttons will again serves as the volume control buttons.)

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Enjoying Bass and Treble at Low Volume

— Loudness Function

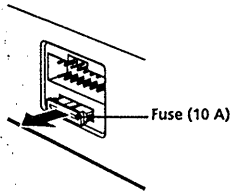
Press the LOUD button for more than two seconds. → "LOUD" will appear on the display.

The bass and treble are boosted. To cancel, press again.

Maintenance

Fuse Replacement

When replacing the fuse, be sure to use one matching the amperage rating stated on the fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

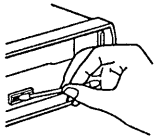


Warning

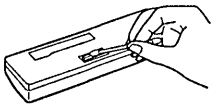
Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

Cleaning the Connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. In order to prevent this, open the front panel by pressing the RELEASE button, then detach it and clean the connectors with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connectors may be damaged.



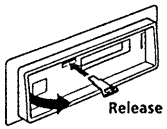
Main unit



Back of the front panel

Dismounting the Unit

1



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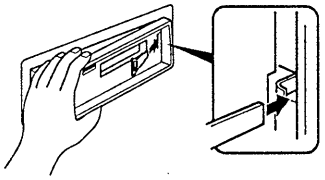

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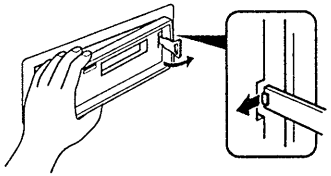
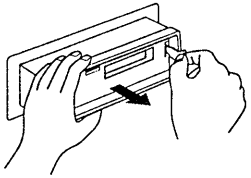


4



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Connections/Conexiones/線路之連接

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- **Run all earth wires to a common earth point.**

Precauciones

- Esta unidad ha sido diseñada para alimentación de 12 V CC, toma a tierra negativa solamente.
- Antes de realizar las conexiones, desconecte el conductor de puesta a masa de la batería del automóvil a fin de evitar cortocircuitos.
- Conecte los cables conectores de alimentación **amarillo** y **rojo** solamente después de haber conectado los demás.
- Cerciórese de conectar el cable conector de alimentación rojo a un terminal de 12 V positivo que se energice al poner la llave de encendido en la posición para accesorios.
- **Conecte todos los conductores de puesta a masa a un punto común.**

注意

- 本機只可使用負極接地12V直流電操作。
- 連接以前，先拔取汽車電池的接地端子，以免發生短路。
- **紅色**及**黃色**電源輸入導線必須等所有電線都連接完畢以後才可連接。
- 紅色電源輸入導線請連接到汽車發動機點火鑰匙被轉在輔助位置時才通電的正12V電源端子。
- **所有地線都必需連接到同一接地點才行。**

Frequency Select Switch

The AM (FM) tuning interval is factory-set to the 9K (50K) position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10K (200K) position before making connections.

Selector de frecuencia

El intervalo de sintonía de AM (FM) ha sido ajustado en fábrica a la posición 9K (50K). Si el sistema de asignación de frecuencias de su país se basa en el intervalo de 10 kHz (200 kHz), ponga este selector, situado en la base de la unidad, en la posición 10 K (200K) antes de realizar las conexiones.

頻率選擇開關

本裝置的 AM (FM) 調諧區間在出廠以前被設定在 "9K (50K)" 位置上。若貴地的頻率區間為 "10 kHz (200 kHz)"，連接以前請先把本機機底的選擇開關設定在 "10K (200K)" 之處。

Change the position with a jeweler's screwdriver, etc.
Cambie la posicion con un destornillador de relojero, etc.
以珠寶行用的先端尖細的螺絲起子等改變開關位置。

Note for Connecting

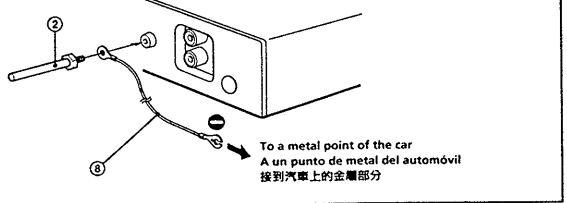
If there is alternator noise (a whining sound when raising engine speed), earth the master unit by connecting it to a metal point of the car with the supplied chassis earth cord ⑧. Connect the ground cord to the master unit with part ② as shown in the illustration. (In case you do not use part ②, take screw ⑦ instead.)

Nota sobre conexión

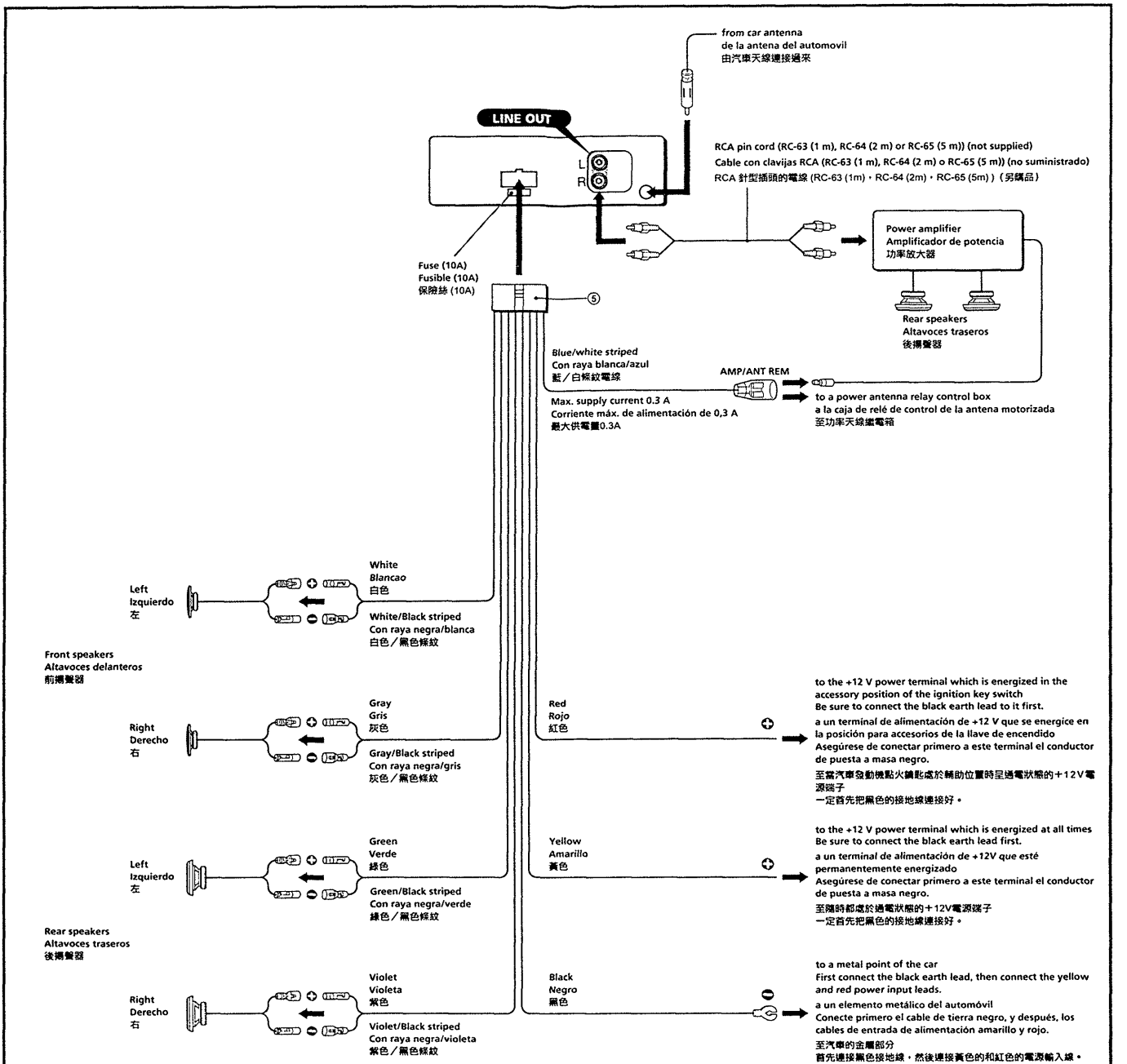
Si el alternador emite ruido (un zumbido al aumentar la velocidad del motor), conecte la unidad principal a tierra y, para ello, enchúfela a un punto de metal del automóvil mediante el cable de toma a tierra del chasis ⑧ suministrado. Conecte el cable de toma a tierra a la unidad principal con la pieza ② como se muestra en la ilustración. (En caso de que no emplee la pieza ②, utilice en su lugar el tornillo ⑦).

連接時的注意事項

如果發生交流電發電機噪聲（即當發動機轉速加快時發生的吵聲時，請以附屬的汽車底盤接地線⑧。把主機連接到汽車的金屬部分。此時請如圖所示，以工具②把接地線連接到主機上。（若不使用工具②的話，則請使用螺釘⑦。）



Connections of Example　　Ejemplo de conexiones　　線路之連接圖例



Notes on the control leads

- *The power antenna control lead (blue/white striped) supplies +12 V DC when you turn on the unit.*
- *A power antenna without relay box cannot be used with this unit.*

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Notas sobre conductores de control

- *El conductor de control de la antena motorizada (con raya blanca/azul) suministrará +12 V CC cuando encienda la unidad.*
- *Con esta unidad no podrá emplearse una antena motorizada desprovista de caja de relé.*

Conexión para protección de la memoria

Si conecta el conductor de entrada amarillo, el circuito de la memoria recibirá siempre alimentación, incluso aunque ponga la llave de encendido en la posición OFF.

Notas sobre la conexión de los altavoces

- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ohmios, y con la potencia máxima admisible adecuada, ya que de lo contrario podría dañarlos.*
- *No conecte los terminales del sistema de altavoces al chasis del automóvil, ni los del altavoz izquierdo a los del derecho.*
- *No intente conectar los altavoces en paralelo.*
- *No conecte altavoces activos (con amplificador incorporado) a los terminales de altavoces de la unidad. Si lo hiciese, podría dañar tales altavoces. Por lo tanto, cerciórese de conectar altavoces pasivos a estos terminales.*

關於控制導線

- *打開機器電源時，功率天線的控制線（藍色／白色條紋）便能供給12 V 直流電。*
- *本機不能使用沒有繼電箱的功率天線。*

保持記憶的線路連接法

當連接著黃色電源輸入電線時，即使汽車發動機點火鑰匙被轉在電源切斷之處，電源仍將靈供給電流到記憶用電路，以維持所記憶著的數據。

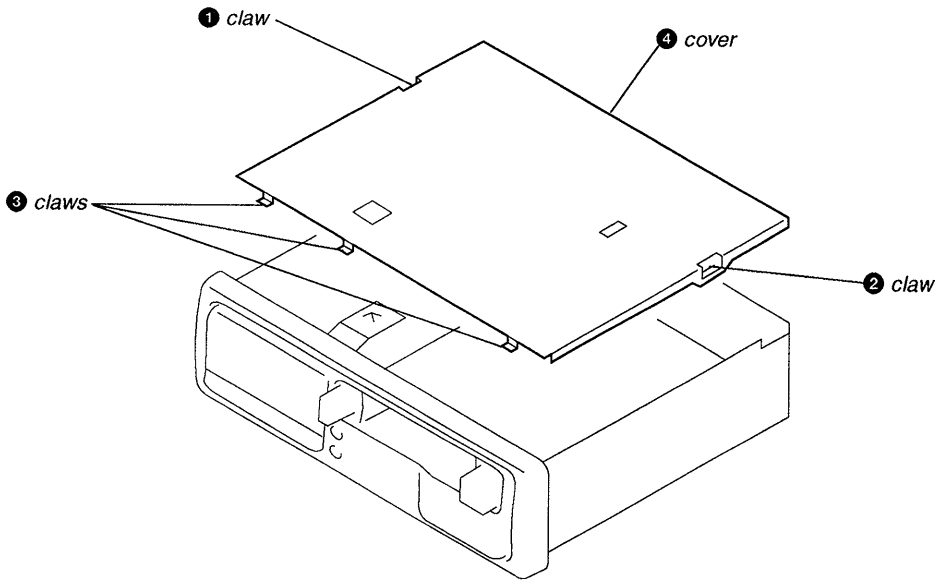
連接揚聲器時的注意事項

- *連接揚聲器電線以前，請先切斷本機電源。*
- *揚聲器請使用阻抗為4 到8 Ω之間，並具有適合本機使用的電容量者。否則會相壞揚聲器。*
- *不可把揚聲器端子連接到汽車低盤，也不可把左揚聲器和右揚聲器相連接。*
- *揚聲器不可平行的連接。*
- *不可連接有源揚聲器（內裝有放大器者）至本機的揚聲器端子，否則會相壞揚聲器。這些端子只能連接無源揚聲器。*

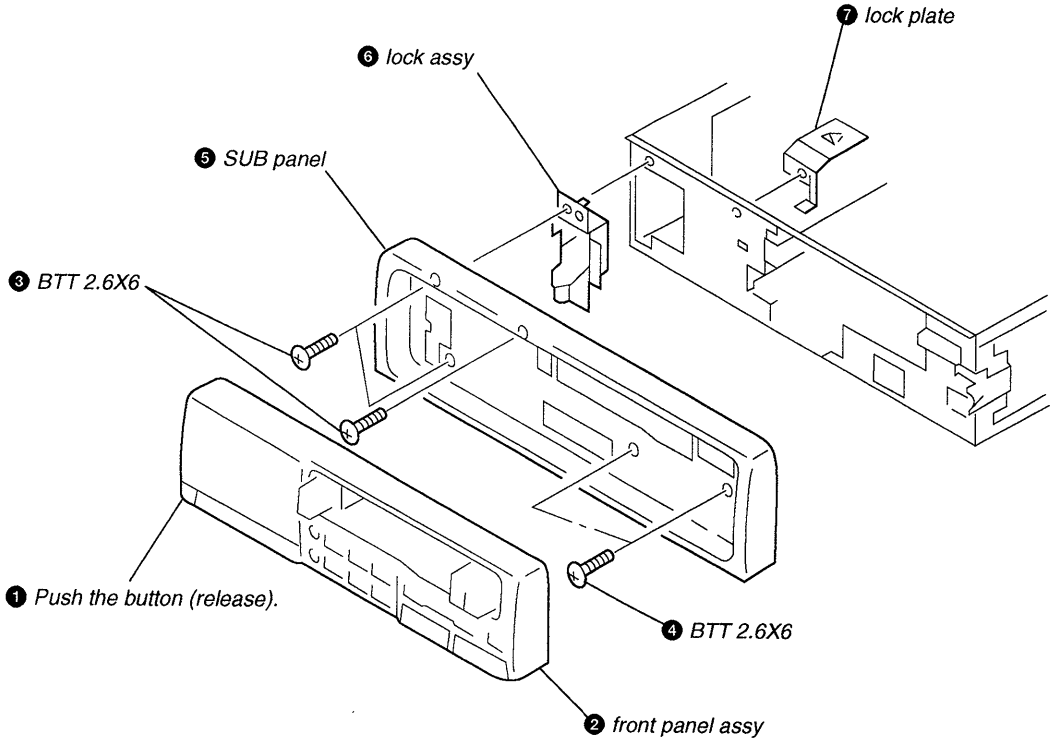
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

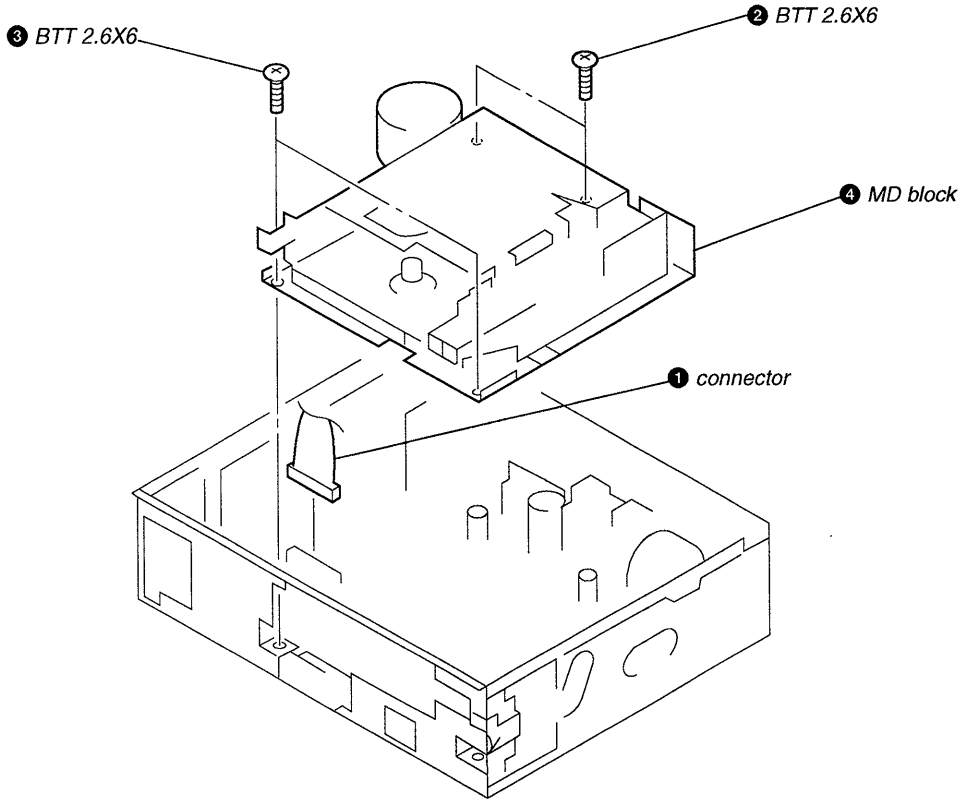
2-1. COVER



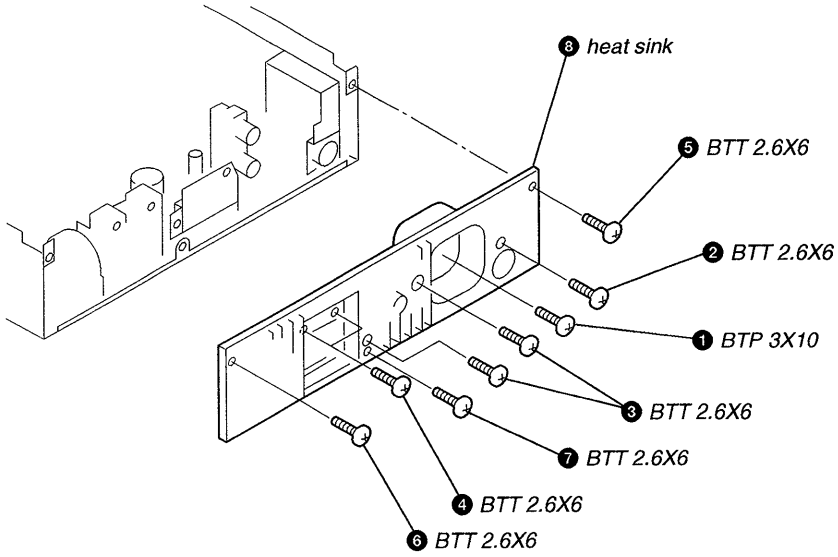
2-2. LOCK ASSY



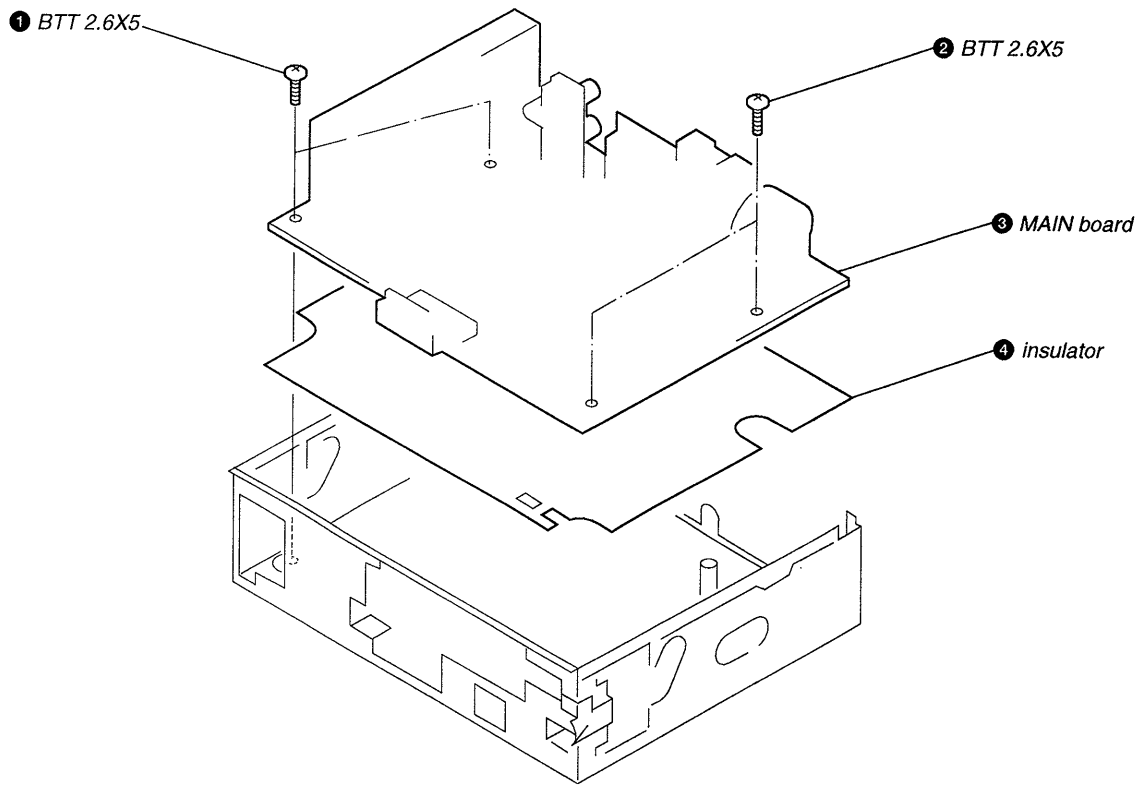
2-3. MD BLOCK



2-4. HEAT SINK



2-5. MAIN BOARD



SECTION 3
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment :
   PB head — Pinch roller
   Idler — Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After the adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4 V).

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	25 – 55 g•cm (0.35 – 0.76 oz•inch)
FWD Back Tension		1.5 – 4 g•cm (0.02 – 0.06 oz•inch)
REV	CQ-102RC	25 – 55 g•cm (0.35 – 0.76 oz•inch)
REV Back Tension		1.5 – 4 g•cm (0.02 – 0.06 oz•inch)
FF, REW	CQ-201B	50 – 150 g•cm (0.69 – 2.08 oz•inch)

SECTION 4
ELECTRICAL ADJUSTMENTS

DECK SECTION **0 dB = 0.775 V**

1. The adjustments should be performed in the order given in this service manual.
2. The adjustments should be performed for both L-CH and R-CH.

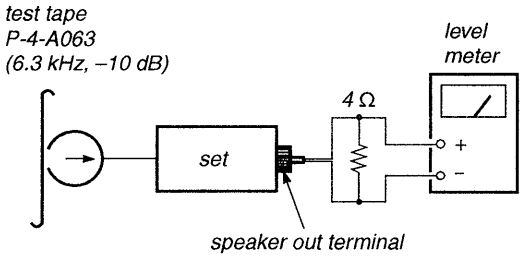
Test Tape

Type	Signal	Used for
P-4-A063	6.3 kHz, –10 dB	head azimuth adjustment
WS-48A	3 kHz, 0 dB	tape speed adjustment

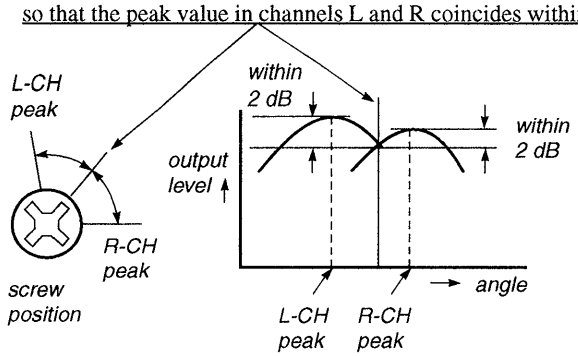
PB Head Azimuth Adjustment

Procedure :

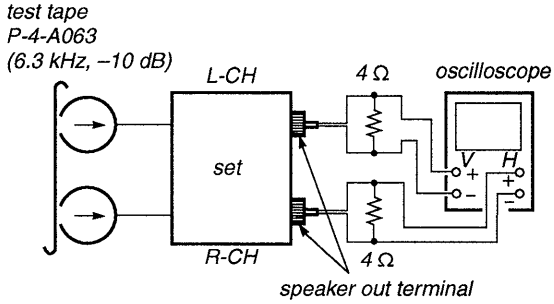
1. Put the set into the FWD PB mode.

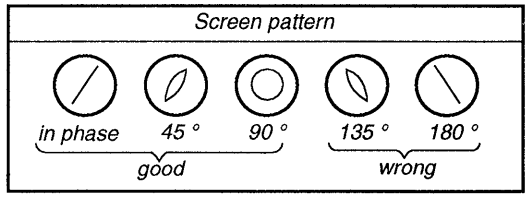


2. Turn the screw and check the output peak valuc. Adjust the screw so that the peak value in channels L and R coincides within 2 dB.



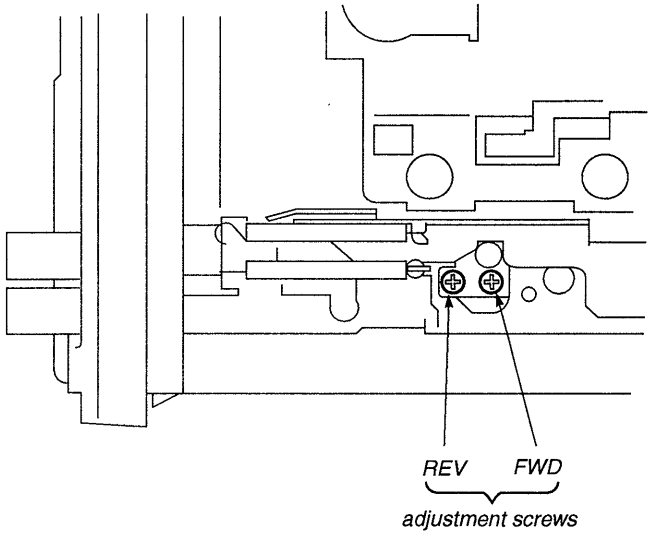
3. Check the phase in the FWD PB mode.





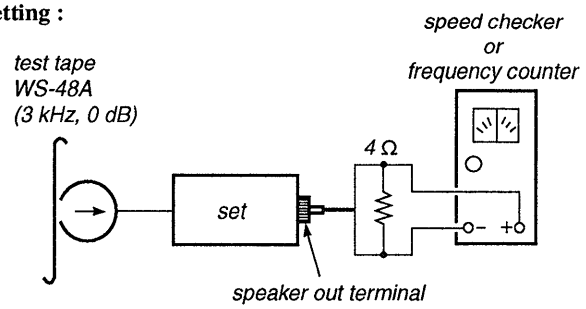
4. Repeat the above adjustment for the REV PB mode.
5. Check that output level difference between FWD PB mode and REV PB mode is within 4 dB.

Adjustment Location :



Tape Speed Adjustment

Setting :



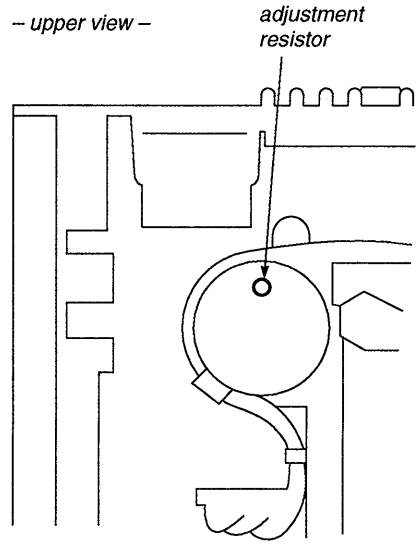
Procedure :

1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the speed checker or frequency counter becomes in specification.

Specification : Constant speed

Speed checker	Frequency counter
– 1.5 to + 0.5 %	2,955 to 3,015 Hz

Adjustment Location :



TUNER SECTION | 0 dB = 1 µV

Cautions during repair

When the tuner assy is defective, replace it by a new one because its internal block is difficult to repair.

TEST MODE

This set have the test mode function. In the test mode, FM Auto Stop Level and AM Auto Stop Level adjustments can be performed easier than it in ordinary procedure.

<Set the Test Mode>

1. Set the "OFF" mode.
2. Push the preset [1] button.
3. Press the [OFF] button while pressing the [FM] button. (Then the display indicates all lights, the test mode is set.)

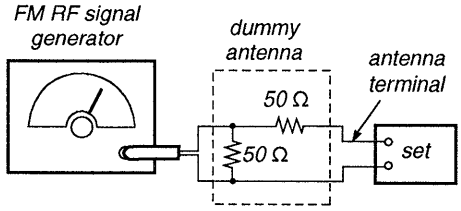
<Release the Test mode>

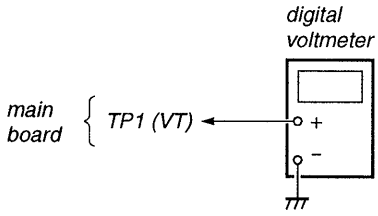
1. Push the [OFF] button.

FM VT Adjustment

Setting :

FM button : FMI
FREQUENCY SELECT switch : FM 50k





Procedure :

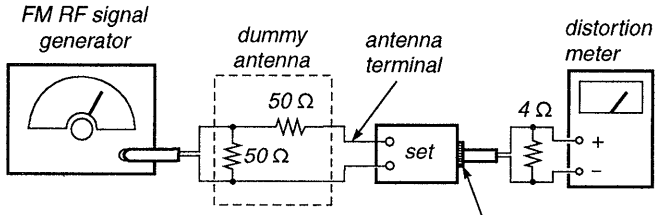
1. Tune the set to 108 MHz.
2. Adjust L104 so that the reading on the digital voltmeter becomes 7.2 ± 0.05 V.

Adjustment Location : See page 16.

FM DET Adjustment

Setting :

FM button : FMI
FREQUENCY SELECT switch : FM 50k



Carrier frequency : 98.0 MHz
Output level : 60 dB (1 mV)
Mode : mono
Modulation : 1 kHz, 75 kHz deviation (100 %)

Procedure :

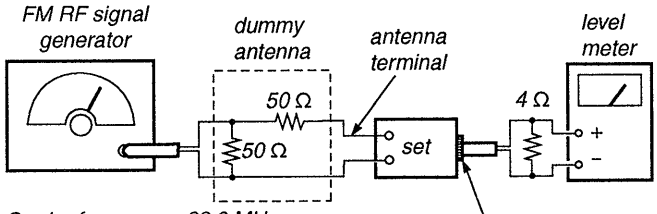
1. Tune the set to 98.0 MHz.
2. Adjust L111 so that the reading on the distortion meter becomes to minimum.

Adjustment Location : See page 16.

FM MIX Adjustment

Setting :

FM button : FMI
FREQUENCY SELECT switch : FM 50k



Carrier frequency : 98.0 MHz
Output level : 10 dB (3.2 μV)
Mode : mono
Modulation : 1 kHz, 75 kHz deviation (100 %)

Procedure:

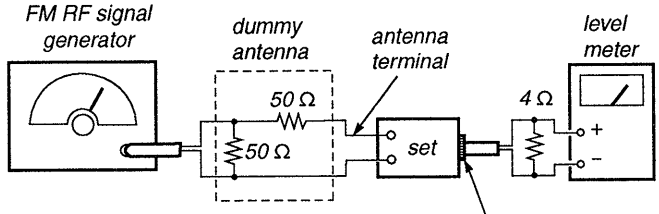
1. Tune the set to 98.0 MHz.
2. Adjust L103 so that the reading on the level meter becomes to maximum.

Adjustment Location : See page 16.

FM Tracking Adjustment

Setting :

FM button : FMI
FREQUENCY SELECT switch : FM 50k



Carrier frequency : 108 MHz, 87.5 MHz
Output level : 10 dB (3.2 μV)
Mode : mono
Modulation : 1 kHz, 75 kHz deviation (100 %)

Procedure :

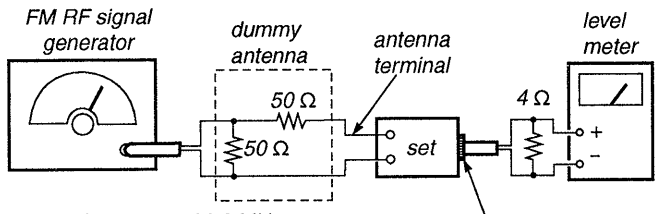
1. Tune the set to 108 MHz. (FM RF signal generator : Carrier frequency 108 MHz)
2. Adjust L102 so that the reading on the level meter becomes to maximum.
3. Tune the set to 87.5 MHz. (FM RF signal generator : Carrier frequency 87.5 MHz)
4. Adjust L100 so that the reading on the level meter becomes to maximum.

Adjustment Location : See page 16.

FM SEP Adjustment

Setting :

FM button : FMI
FREQUENCY SELECT switch : FM 50k



Carrier frequency : 98,0 MHz
Output level : 60 dB (1 mV)
Mode : mono (R-CH)
Modulation : 1 kHz, 67.5 kHz deviation (90 %)
19 kHz, 7.5 kHz deviation (10 %)

Procedure :

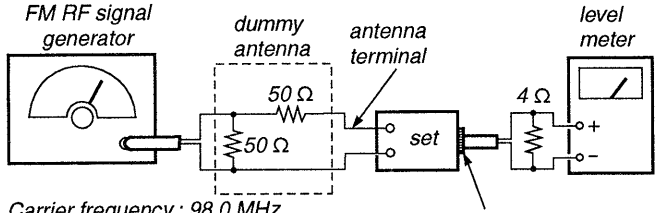
1. Tune the set to 98.0 MHz.
2. Adjust R134 so that the reading on the level meter becomes to minimum.

Adjustment Location : See page 16.

FM SNC Adjustment

Setting :

FM button : FMI
FREQUENCY SELECT switch : FM 50k



Carrier frequency : 98.0 MHz
Output level : 40 dB (100 μV)
Mode : mono (L-CH)
Modulation : 1 kHz, 67.5 kHz deviation (90 %)
19 kHz, 7.5 kHz deviation (10 %)

Procedure :

1. Tune the set to 98.0 MHz.
2. The then output level is supposing that (A) dB.
3. Change the FM RF signal generator mode to R-CH.
4. Adjust R138 so that the output level is (A) – 12 dB.

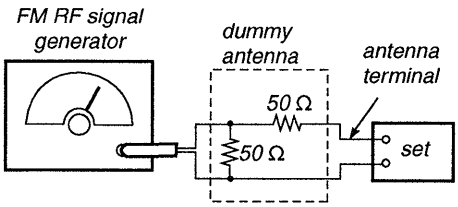
Adjustment Location : See page 16.

FM Auto Stop Level Adjustment

Note : Be sure to perform this adjustment before "AM Auto Stop Level Adjustment".

Setting :

FM button : FMI
FREQUENCY SELECT switch : FM 50k

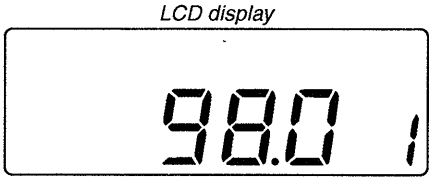


Carrier frequency: 98.0 MHz
Output level : 22 dB (12.6 μV)
Mode : mono
Modulation : 1 kHz, 75 kHz deviation (100 %)

Procedure :

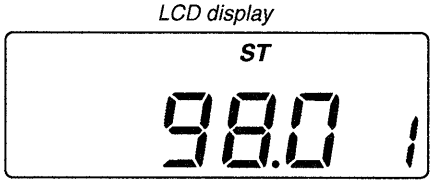
1. Set to the test mode. (See page 12.)
2. Push the [FM] button and set to FMI.

LCD display



3. Adjust R131 like to appear the ST indicator of LCD display.

LCD display

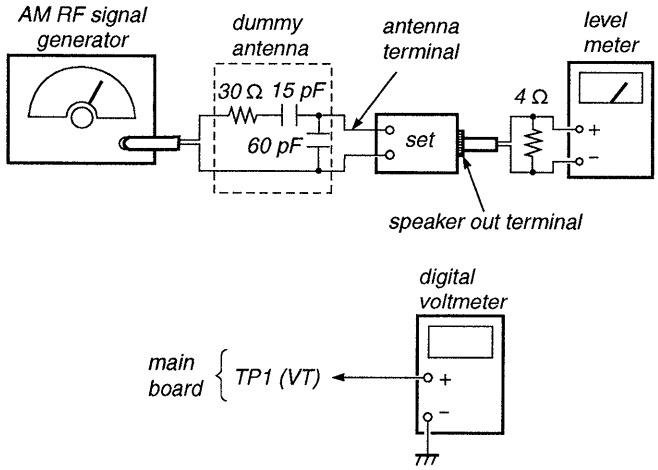


Adjustment Location : See page 16.

AM VT Adjustment

Setting :

AM button : AM
FREQUENCY SELECT switch : AM 9k



Procedure :

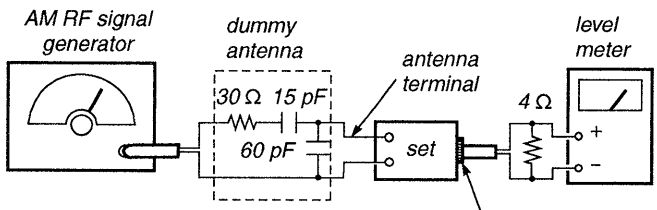
1. Tune the set to 531 kHz.
2. Adjust L108 so that the reading on the digital voltmeter becomes 1.2 ± 0.05 V.

Adjustment Location : See page 16.

AM IFT Adjustment

Setting :

AM button : AM
FREQUENCY SELECT switch : AM 9k



Carrier frequency : 999 kHz
Output level : 20 dB (10 μV)
Modulation : 400 Hz, 22.5 kHz deviation (30 %)

Procedure :

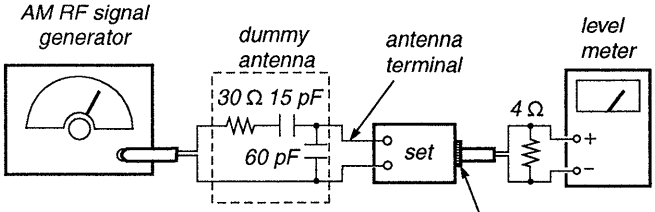
1. Tune the set to 999 kHz.
2. Adjust L110 so that the reading on the level meter becomes to maximum.

Adjustment Location : See page 16.

AM Tracking Adjustment

Setting :

AM button : AM
FREQUENCY SELECT switch : AM 9k



Carrier frequency : 612 kHz, 1,404 kHz
Output level : 20 dB (10 µV)
Modulation : 400 Hz, 22.5 kHz deviation (30 %)

Procedure :

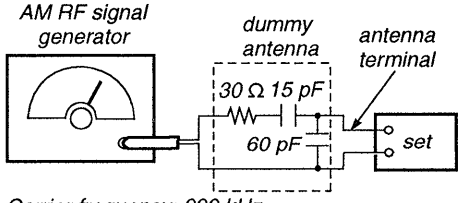
1. Tune the set to 612 kHz. (AM RF signal generator : Carrier frequency 612 kHz)
2. Adjust L107 so that the reading on the level meter becomes to maximum.
3. Tune the set to 1,404 kHz. (AM RF signal generator : Carrier frequency 1,404 kHz)
4. Adjust C119 so that the reading on the level meter becomes to maximum.

Adjustment Location : See page 16.

AM Auto Stop Level Adjustment

Setting :

AM button : AM
FREQUENCY SELECT switch : AM 9k

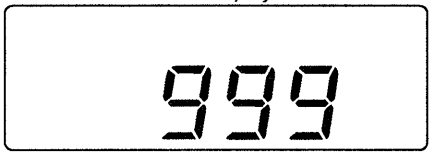


Carrier frequency: 999 kHz
Output level : 33 dB (44.7 µV)
Modulation : 400 Hz, 22.5 kHz deviation (30 %)

Procedure :

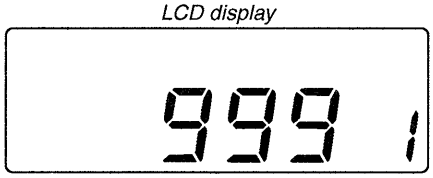
1. Set to the test mode. (See page 12.)
2. Push the [AM] button and set to AM.

LCD display



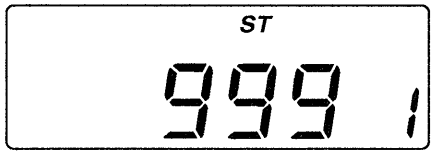
3. Push the [SEL] button and set to MODE1.

LCD display



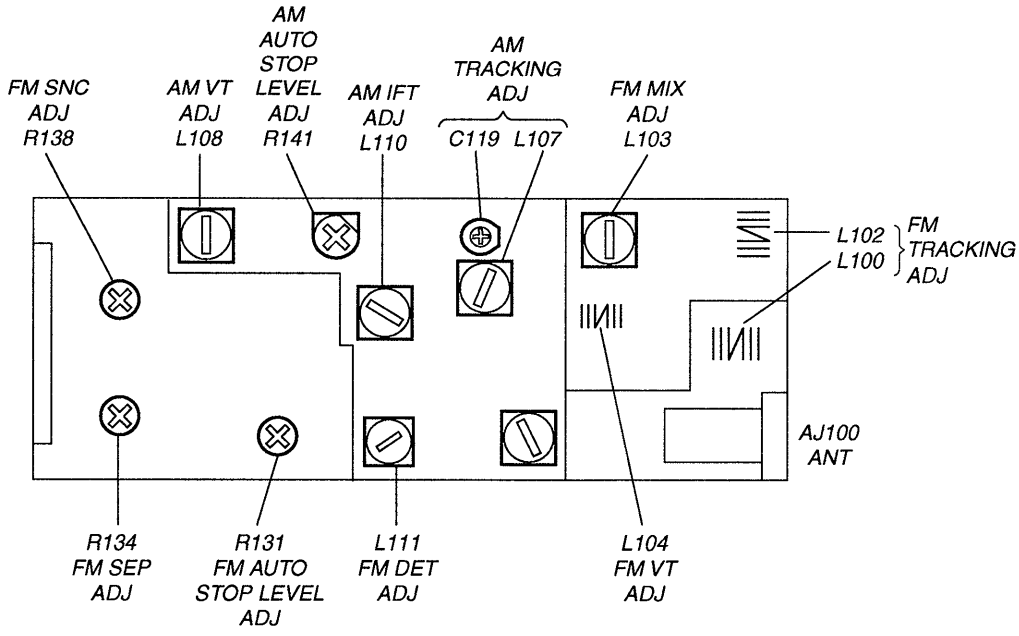
4. Adjust R141 like to appear the ST indicator of LCD display.

LCD display



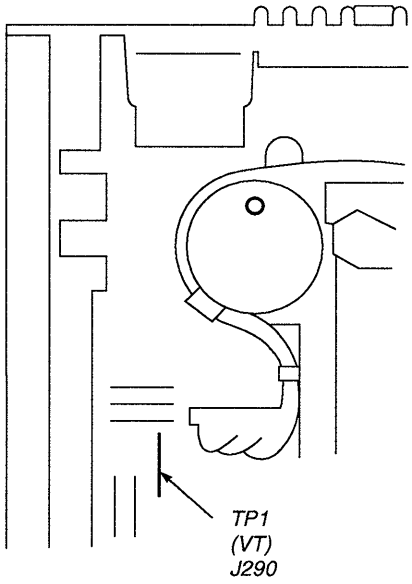
Adjustment Location : See page 16.

Adjustment Location : ET201 (tuner assy) – component side –



Measurement Point : main board (component side)

– set upper view –



SECTION 5
DIAGRAMS

5-1. IC PIN DESCRIPTION

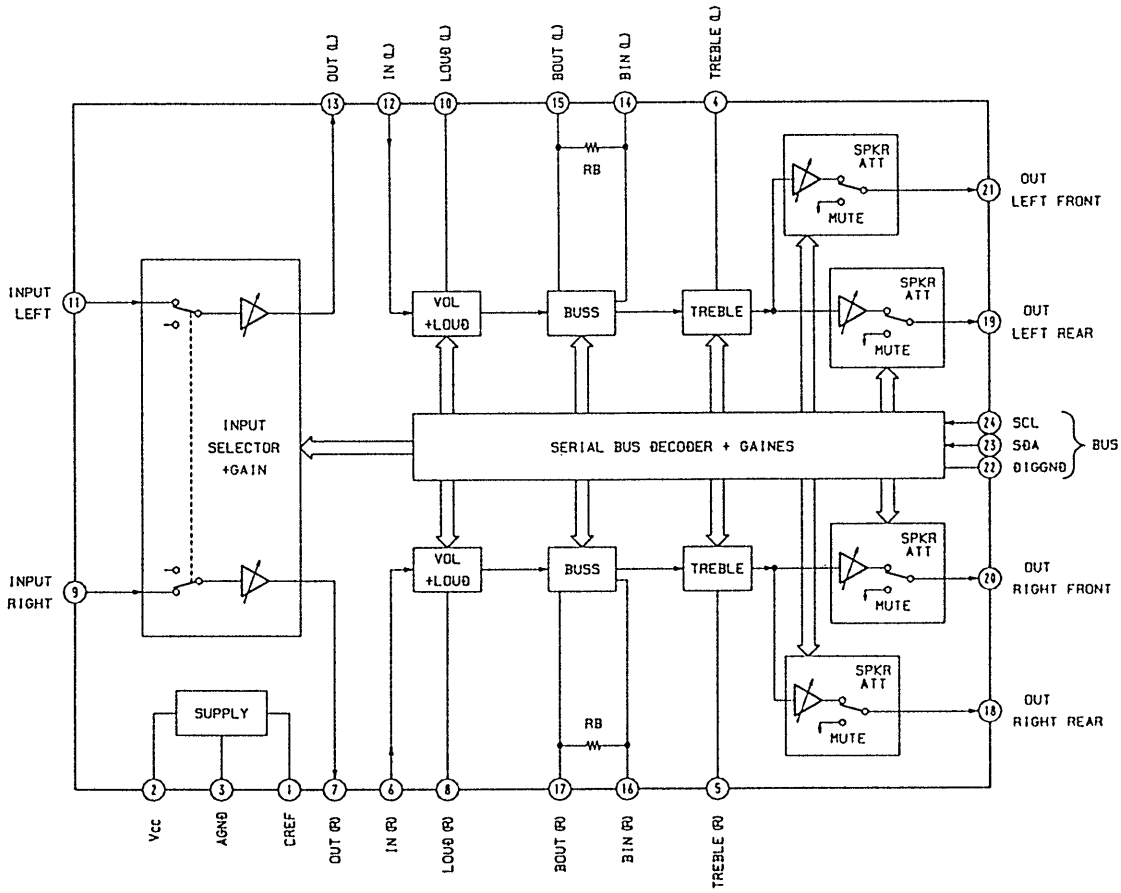
• IC701 LC72356-9241 (System Controller)

Pin No.	Pin Name	I/O	Pin Description
1	XIN	I	4.5 MHz crystal oscillator input pin
2	TEST2	I	LSI test pin (Fixed at "L" in this set.)
3	SEEK	O	SEEK control output pin ("L" : NORMAL, "H" : SEEK)
4	FM/$\overline{\text{AM}}$	O	BAND select output pin ("L" : AM, "H" : FM)
5	$\overline{\text{LW}}$	O	LW band select output pin (Not used in this set.)
6	LOCAL	O	LOCAL control output pin ("L" : DX, "H" : LOCAL)
7	—	O	Not used. (Connect to GND.)
8	VOL SO	O	Serial data output pin for volume.
9	VOL CK	O	Serial clock output pin for volume.
10	CDC EN	O	CD select button with/without setting pin
11	CDC SI	I	Serial data input pin for SONY BUS. (Not used in this set.)
12	CDC SO	O	Serial data output pin for SONY BUS. (Not used in this set.)
13	CDC CLK	O	Serial clock output pin for SONY BUS. (Not used in this set.)
14	—	O	Not used. (Connect to GND.)
15	MUTE	O	Mute output pin
16	$\overline{\text{AMP MUTE}}$	O	Audio control output pin (Mute)
17	$\overline{\text{BUS RST}}$	O	Bus reset output pin for SONY BUS. ("L" : RESET) (Not used in this set.)
18	$\overline{\text{BUS ON}}$	O	Bus control output pin for SONY BUS. ("L" : ON) (Not used in this set.)
19-25	—	O	Not used. (Open)
26	A.STBY	O	Audio control output pin
27	FOR/$\overline{\text{REV}}$	I	Forward/reverse detection input pin ("L" : REV, "H" : FOR)
28	$\overline{\text{WIND}}$	I	Tape Fast Forward/Rewind detection input pin ("H" : NORMAL, "L" : WIND)
29	RA/$\overline{\text{TA}}$	I	Radio/tape mode detection input pin ("H" : RADIO, "L" : TAPE)
30	$\overline{\text{TEST}}$	I	Test mode wake-up input pin
31	VDD	—	Power supply pin (5 V ± 5 %)
32	$\overline{\text{ACC CHK}}$	I	Accessory detection input pin ("L" : ACC ON)
33	MOTOR	O	Motor control output pin
34	POWER ON	O	Power control output pin
35	LAMP ON	O	Illumination lamp control output pin
36-43	—	O	Not used. (Open)
44	BEEP	O	Caution alarm output pin
45	LCD CE	O	Chip enable output pin for LCD driver.
46	LCD CLK	O	Serial clock output pin for LCD driver.
47	LCD SO	O	Serial data output pin for LCD driver.
48	$\overline{\text{LCD INH}}$	O	Display light off control output pin for LCD driver. (Normally, "L" : All light off)
49	$\overline{\text{PANEL}}$	I	Input pin for detecting mounting of front panel. ("L" : ON, "H" : OFF)
50	DIRT EN	I	Setting input pin for East European model. (Fixed at "H" in this set.)
51	LW EN	I	LW band with/without select pin. (Fixed at "L" in this set.)
52	SDK EN	I	Traffic information function select pin. (Fixed at "H" in this set.)
53	10k EN	I	Frequency select switch select pin
54	P.SEL	I	Illumination light ON/OFF select pin at Power off. (Fixed at "L".)
55	BAT CHK	I	Battery detection input pin ("H" : Battery ON)
56	$\overline{\text{RESET}}$	I	System reset input pin
57	—	O	Not used. (Open)
58	$\overline{\text{MONO}}$	—	Not used. (Open)
59, 60	SEL B, SEL A	O	Audio source select output pin
61-63	ADC2-ADC0	I	Key input pin

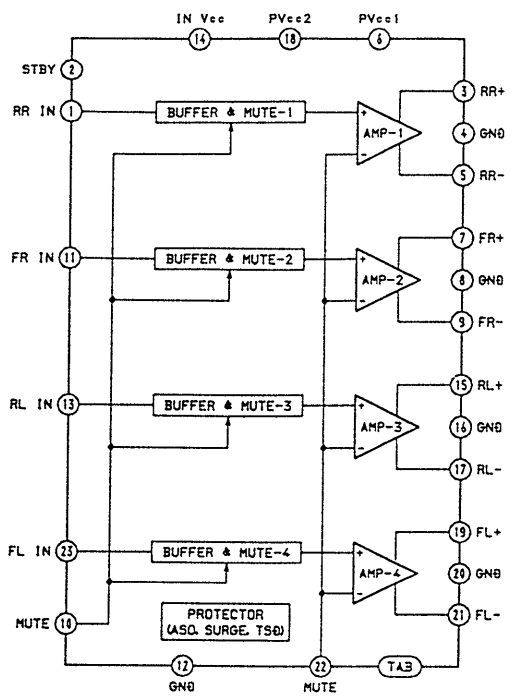
Pin No.	Pin Name	I/O	Pin Description
64	—	O	Not used. (Connect to VDD.)
65	DK	I	DK signal input pin
66	SK	I	SK signal input pin
67	$\overline{\text{HOLD}}$	I	HOLD pin (PLL and CLOCK STOP control)
68	$\overline{\text{SNS}}$	I	Power fail detection pin (Connect to VDD.)
69	SD/ST	I	SD/stereo station detect input pin
70	IF	I	IF count input pin (FM = 10.7 MHz, AM = 450 kHz)
71	EO3	O	2nd PLL error output pin (Not used in this set.)
72	SUBPD	O	Sub error output pin (For High speed lock up) (Not used in this set.)
73	VDD	—	Power supply pin (5 V ± 5 %)
74	AM IN	I	AM VCO input pin
75	FM IN	I	FM VCO input pin
76	GND	—	GND
77	EO2	O	PLL error output pin (Not used in this set.)
78	EO1	O	PLL error output pin
79	TEST1	I	LSI test pin (Fixed at "L" in this set.)
80	XOUT	O	4.5 MHz crystal oscillator output pin

• **IC Block Diagrams**

IC401 TDA7314S



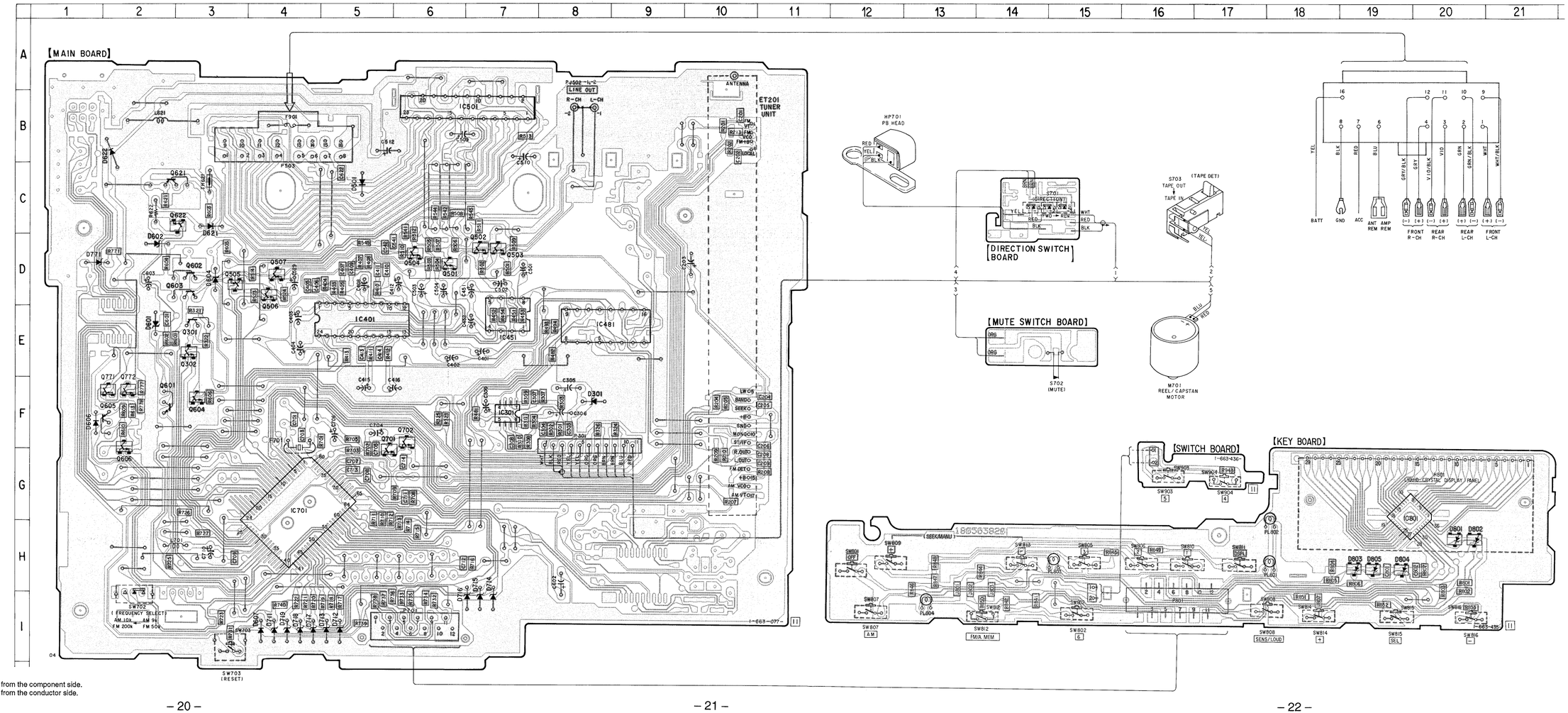
IC501 HA13153



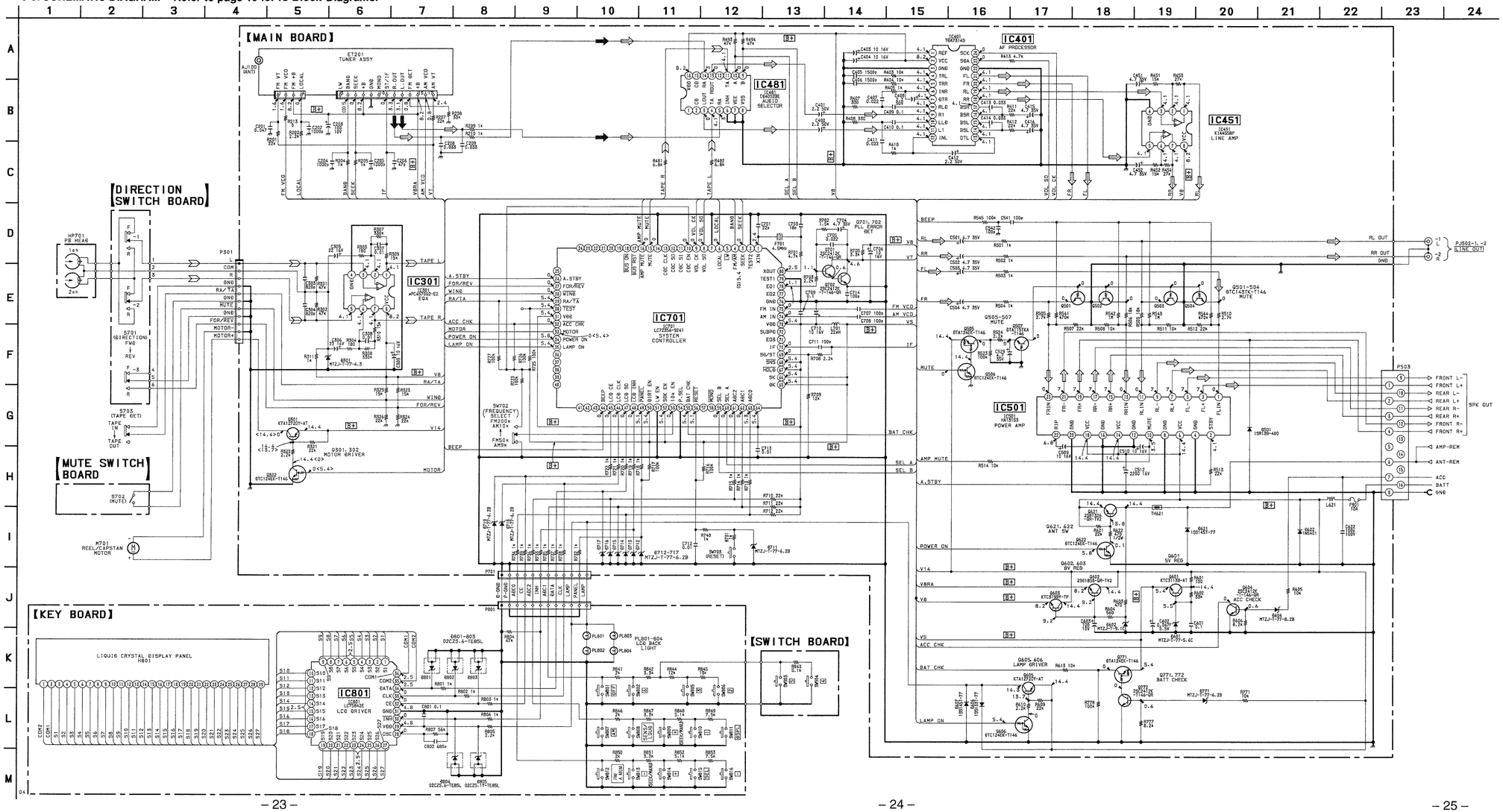
5-2. PRINTED WIRING BOARDS

• Semiconductor Location

Ref. No.	Location
D301	F-8
D501	C-5
D601	E-2
D602	D-2
D604	D-3
D606	F-1
D607	I-4
D621	C-3
D622	B-2
D711	I-4
D712	I-5
D713	I-5
D714	I-7
D715	I-7
D716	I-6
D717	I-4
D718	I-4
D719	I-4
D771	D-1
D801	H-20
D802	H-20
D803	H-19
D804	H-19
D805	H-19
IC301	F-7
IC401	E-5
IC451	E-7
IC481	E-8
IC501	B-6
IC701	G-4
IC801	G-19
Q301	E-3
Q302	E-3
Q501	D-6
Q502	D-7
Q503	D-7
Q504	D-6
Q505	D-3
Q506	D-4
Q507	D-4
Q601	F-2
Q602	D-3
Q603	D-3
Q604	F-3
Q605	F-2
Q606	G-2
Q621	C-3
Q622	C-3
Q701	F-5
Q702	F-6
Q771	F-2
Q772	F-2



Note :
• ○— : parts extracted from the component side.
• —— : parts extracted from the conductor side.



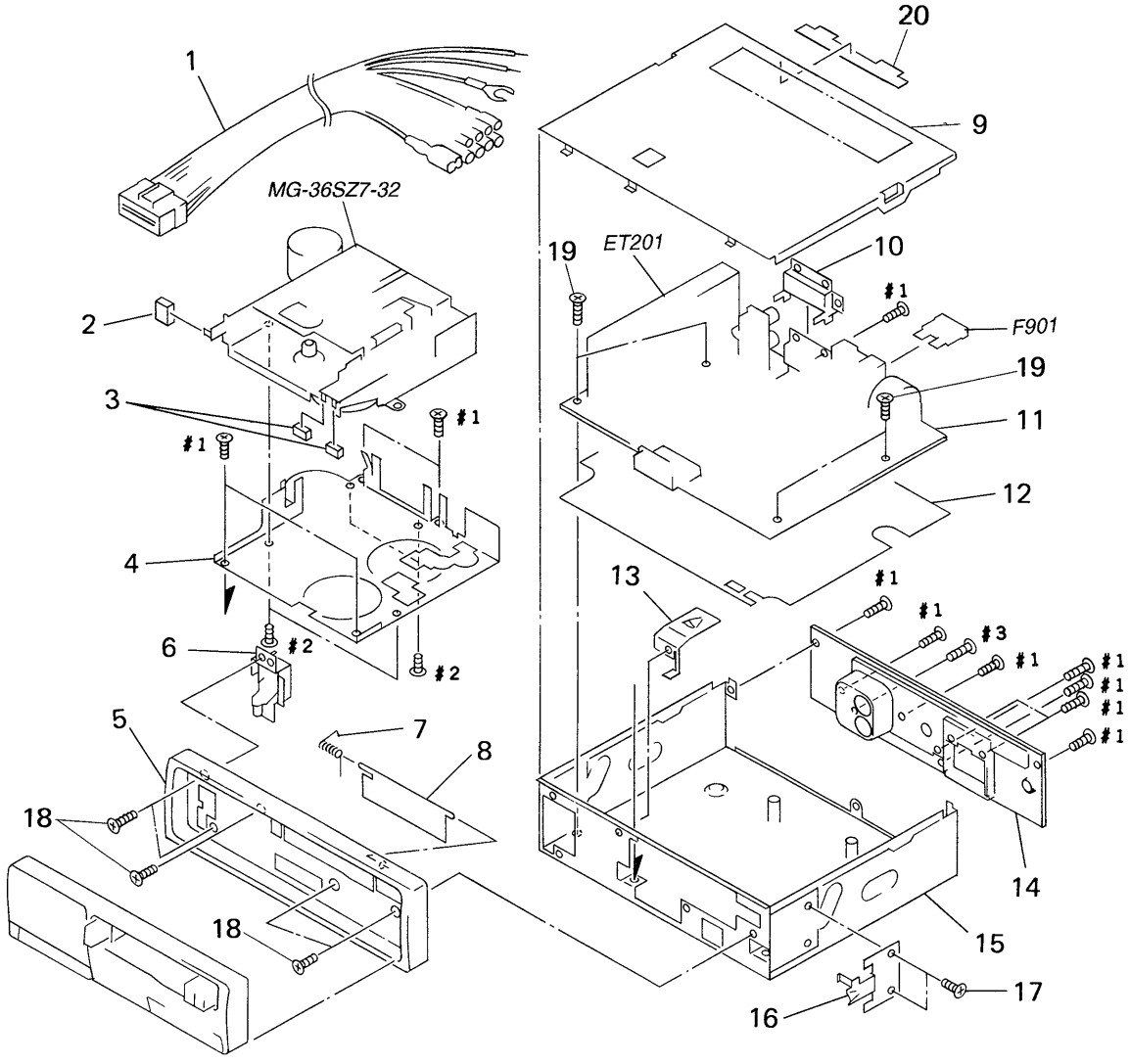
Note :

- All capacitors are in µF unless otherwise noted. pF : µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
  ( ) : AM
  < > : PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerance.
- Signal path.
  ⇨ : FM
  ➡ : AM
  ⇨ : PB

SECTION 6
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

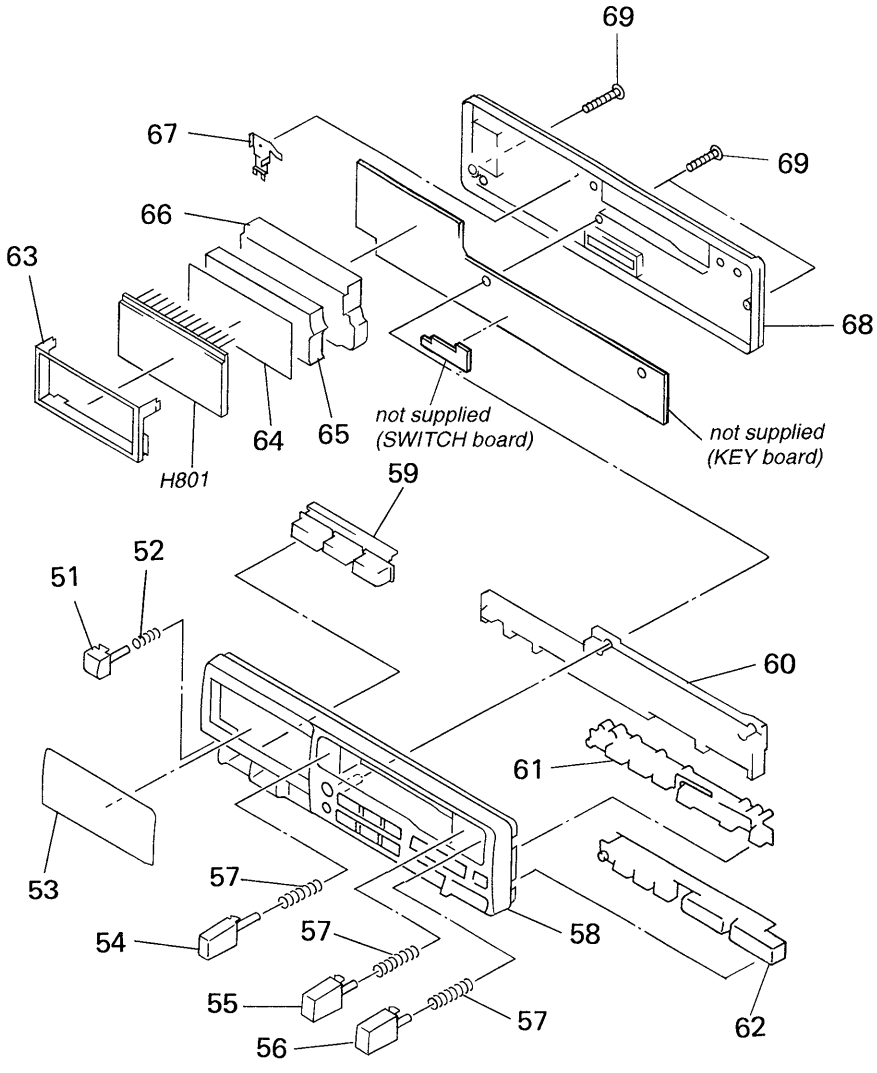
6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	1-776-207-31	CORD (WITH CONNECTOR) (POWER)	
2	3-937-528-01	COVER (EJECT)	
3	3-937-529-01	COVER (FF/REW)	
* 4	3-937-531-01	BRACKET (MD)	
5	3-937-525-01	PANEL, SUB	
6	X-3372-433-1	LOCK ASSY	
7	3-915-720-01	SPRING (C DOOR), TORSION	
8	3-937-526-01	DOOR, CASSETTE	
9	3-937-523-01	COVER	
* 10	3-937-533-01	BRACKET (IC)	
* 11	A-3294-158-A	MAIN BOARD, COMPLETE	
* 12	3-937-532-01	INSULATOR	
13	3-916-055-01	PLATE, LOCK	
* 14	3-008-361-01	HEAT SINK	
* 15	X-3372-423-1	CHASSIS ASSY	
16	3-916-056-01	PLATE (R), LOCK	
17	3-344-561-21	SCREW (M4X4)	
18	3-916-975-11	SCREW (2.6X6) (BZN), +BTT	
19	3-916-976-01	SCREW (2.6X5) (CZN), +BTT	
* 20	3-939-569-01	SHEET (VIBRATION PROOF)	
ET201	A-3291-810-A	TUNER ASSY	
F901	1-533-330-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	

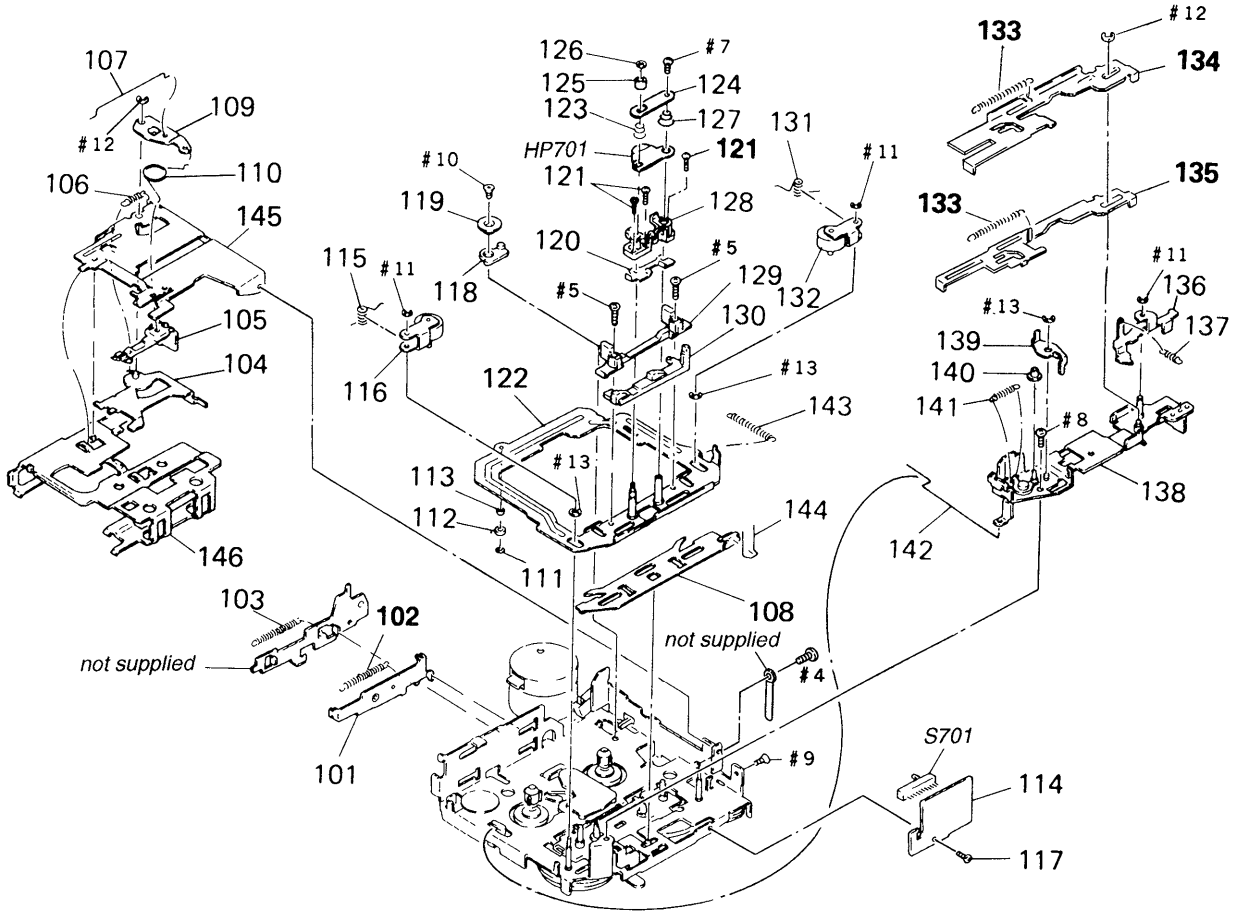
SEE ADDITIONAL INFORMATION

6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-937-551-01	BUTTON (RELEASE)	
52	3-937-553-01	SPRING (RELEASE)	
53	3-007-662-01	PLATE, INDICATION	
54	3-937-550-01	BUTTON (EJECT)	
55	3-937-549-01	BUTTON (REW)	
56	3-937-548-01	BUTTON (FF)	
57	3-937-632-01	SPRING (EJECT)	
58	3-007-658-01	PANEL, FRONT	
59	3-937-547-01	BUTTON (SEL)	
* 60	3-937-556-01	PLATE, LIGHT GUIDE	
61	3-939-884-01	BUTTON (SEEK/MANU)	
62	3-007-671-01	BUTTON (FM)	
* 63	3-937-557-01	PLATE (LCD), GROUND	
* 64	3-937-560-01	SHEET (REFLECTOR)	
* 65	3-937-559-01	PLATE (LCD), LIGHT GUIDE	
66	3-937-558-01	HOLDER (LCD)	
67	3-937-555-01	PLATE (FP), GROUND	
68	3-937-554-01	PANEL, FRONT BACK	
69	3-916-981-11	SCREW (2X8) (BZN), +BTT	
H801	1-801-456-11	DISPLAY PANEL, LIQUID CRYSTAL	

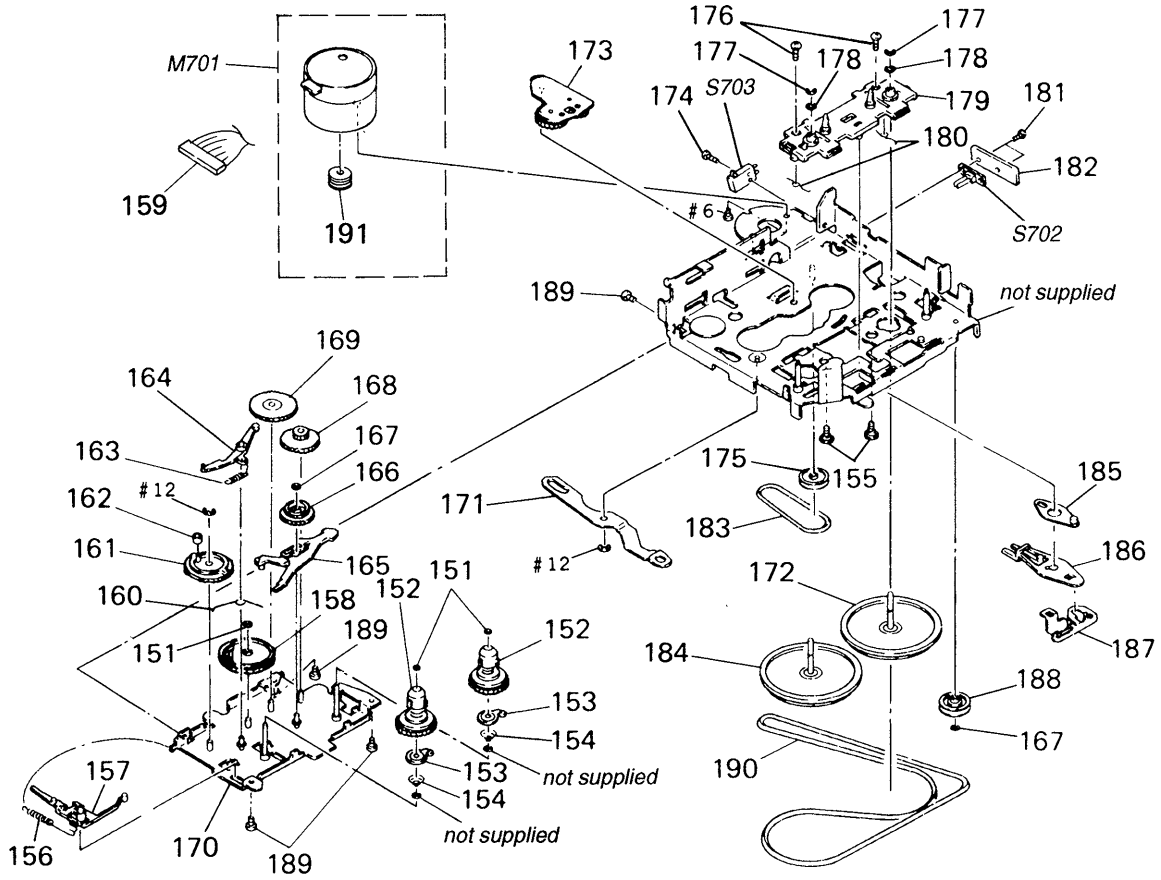
6-3. MECHANISM SECTION (1)
(MG-36SZ7-32)



Ref. No.	Part No.	Description	Remark
101	3-938-660-01	LEVER, EJECT	
102	3-392-950-01	SPRING	
103	3-392-951-01	SPRING	
* 104	3-392-921-01	LOCK ASSY, EJECT CAM	
105	3-392-972-01	HOOKER, TAPE	
106	3-392-953-01	SPRING	
107	3-392-969-01	LINK, RETURN	
* 108	3-392-919-01	ARM ASSY, F,R SELECTION	
* 109	3-392-932-01	PLATE, CENTER	
110	3-392-961-01	SPRING (B)	
111	3-570-615-02	POLY-WASHER (DIA.1.2)	
112	3-392-945-01	ROLLER (A), H.P	
113	3-392-942-01	ROLLER (B), H.P	
114	3-392-970-01	CHASSIS, SWITCH (DIRECTION SWITCH BOARD)	
115	3-392-958-01	SPRING (R)	
116	3-375-378-01	ARM (R) ASSY, PINCH	
* 117	4-908-792-11	SCREW (B2)	
118	3-372-244-01	ARM (N), MUTE	
* 119	3-397-427-01	COLLAR, MUTE ARM	
120	3-377-908-01	SHIM (X), ADJUSTOR	
121	3-375-379-01	SCREW, AZIMUTH	
* 122	3-392-975-05	PLATE ASSY (S), HEAD	
123	3-392-956-01	SPRING (A)	
* 124	3-392-930-01	RETAINER, SPRING	

Ref. No.	Part No.	Description	Remark
125	3-392-943-01	ROLLER, FF	
126	3-676-387-00	POLY-SLIDER (DIA.1.6)	
127	3-392-955-01	SPRING (A)	
* 128	3-379-142-01	ARM (B), ADJUSTOR	
129	3-392-984-02	GUIDE, TAPE	
130	3-377-909-02	LINK (X), ADJUSTOR	
131	3-392-957-01	SPRING (F)	
132	3-375-377-01	ARM (F) ASSY, PINCH	
133	3-392-948-01	SPRING	
134	3-938-658-01	LEVER, FF	
135	3-938-659-01	LEVER, REW	
* 136	3-392-935-01	ARM, LOCK	
137	3-392-917-01	SPRING	
* 138	3-372-242-01	BRACKET ASSY (D), LEVER	
* 139	3-392-933-01	LEVER (B), CHANGE	
140	3-392-994-01	ROLLER, PROGRAM	
141	3-392-954-01	SPRING	
142	3-372-243-01	LINK (B), SELECTOR	
143	3-392-952-01	SPRING	
144	3-392-962-01	SPRING	
145	3-375-383-01	HANGER (X), CASSETTE	
146	3-375-384-01	HOLDER (X), CASSETTE	
HP701	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)	
S701	1-692-502-11	SWITCH, SLIDE (DIRECTION)	

6-4. MECHANISM SECTION (2)
(MG-36SZ7-32)



Ref. No.	Part No.	Description	Remark
151	3-676-387-00	POLY-SLIDER (DIA.1.6)	
152	3-376-196-01	SPINDLE ASSY (S), REEL	
153	3-375-380-01	CAM ASSY, DETECTION	
154	3-370-619-01	SPRING, BACK TENSION	
155	3-392-918-01	SCREW, EJECT HOOK	
156	3-392-959-01	SPRING	
157	3-392-985-02	RATCHET	
158	3-392-990-01	GEAR, DETECTION	
159	3-008-116-01	CORD ASSY, CONNECTOR	
160	3-392-960-01	SPRING	
161	3-392-987-01	GEAR, SELECTOR	
162	3-392-944-01	COLLAR (SELECTOR GEAR)	
163	3-375-131-01	SPRING, GEAR LOCK ARM	
164	3-392-989-02	ARM, GEAR LOCK	
165	3-392-986-01	ARM, SENSOR	
166	3-392-915-01	GEAR, IDLE	
167	3-570-615-02	POLY-WASHER (DIA.1.2)	
168	3-392-936-01	GEAR (A)	
169	3-392-937-01	GEAR (B)	
* 170	3-392-976-01	BASE ASSY, REEL	
* 171	3-392-979-01	LEVER, REVERSE	
172	3-392-926-02	FLYWHEEL ASSY (BF)	

Ref. No.	Part No.	Description	Remark
173	3-392-916-01	ARM ASSY, TU GEAR	
174	3-318-203-11	SCREW (B1.7X6), TAPPING	
175	3-392-938-01	GEAR, PULLY	
176	3-318-204-81	SCREW (M1.7X3), TAPPING	
177	3-590-768-00	RING (A), E	
178	3-701-437-11	POLY-SLIDER (A)	
* 179	3-375-381-01	BRACKET ASSY (X), CM	
180	3-392-963-01	SPRING (R)	
181	3-318-204-91	SCREW (M1.7X4), TAPPING	
182	3-375-376-01	MUTE (PWB) (MUTE SWITCH BOARD)	
183	3-375-375-02	BELT (C), SUB	
184	3-392-995-02	FLYWHEEL ASSY (BR)	
* 185	3-392-925-01	ARM (A) ASSY, F.R	
* 186	3-392-939-01	ARM, FF	
* 187	3-392-934-01	ARM (B), F.R	
188	3-392-941-01	PULLEY (A), IDLE	
* 189	4-908-792-11	SCREW (B2)	
190	3-392-967-01	BELT, MAIN	
* 191	3-392-913-01	PULLEY, MOTOR	
M701	X-3364-496-1	MOTOR ASSY (REEL/CAPSTAN)	
S702	1-692-065-11	SWITCH, LEAF (MUTE)	
S703	1-554-790-21	SWITCH, POWER (TAPE DET)	

KEY

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example:
  uA.. : μA.. uPA.. : μPA..
  uPB.. : μPB.. uPC.. : μPC.. uPD.. : μPD..
- CAPACITORS
  uF : μF
- COILS
  uH : μH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		**********			
*	3-937-557-01	PLATE (LCD), GROUND			
	3-937-558-01	HOLDER (LCD)			
*	3-937-559-01	PLATE (LCD), LIGHT GUIDE			
*	3-937-560-01	SHEET (REFLECTOR)			
		< CAPACITOR >			
C801	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C802	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
		< DIODE >			
D801	8-719-025-31	DIODE 02CZ5.6-TE85L			
D802	8-719-025-31	DIODE 02CZ5.6-TE85L			
D803	8-719-025-31	DIODE 02CZ5.6-TE85L			
D804	8-719-025-31	DIODE 02CZ5.6-TE85L			
D805	8-719-043-82	DIODE 02CZ5.1Y-TE85L			
		< LIQUID CRYSTAL DISPLAY >			
H801	1-801-456-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< IC >			
IC801	8-759-433-68	IC LC75842E			
		< JUMPER RESISTOR >			
J801	1-216-296-00	CONDUCTOR, CHIP	(3216)		
J802	1-216-296-00	CONDUCTOR, CHIP	(3216)		
J803	1-216-296-00	CONDUCTOR, CHIP	(3216)		
J807	1-216-296-00	CONDUCTOR, CHIP	(3216)		
		< CONNECTOR >			
P801	1-764-423-11	PIN, CONNECTOR 12P			
		< PILOT LAMP >			
PL801	1-517-474-21	LAMP, PILOT			
PL802	1-517-474-21	LAMP, PILOT			
PL803	1-517-474-21	LAMP, PILOT			
PL804	1-517-474-21	LAMP, PILOT			

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R801	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R802	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R803	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R804	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R805	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R806	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R807	1-216-091-00	METAL CHIP	56K	5%	1/10W
R841	1-216-205-11	METAL GLAZE	2K	5%	1/8W
R842	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R844	1-216-075-00	METAL CHIP	12K	5%	1/10W
R845	1-216-076-00	METAL CHIP	13K	5%	1/10W
R846	1-216-056-00	METAL GLAZE	2K	5%	1/10W
R847	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R848	1-216-066-00	METAL CHIP	5.1K	5%	1/10W
R849	1-216-070-00	METAL CHIP	7.5K	5%	1/10W
R850	1-216-056-00	METAL GLAZE	2K	5%	1/10W
R851	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R852	1-216-066-00	METAL CHIP	5.1K	5%	1/10W
R853	1-216-070-00	METAL CHIP	7.5K	5%	1/10W
		< SWITCH >			
SW801	1-554-813-41	SWITCH, KEY BOARD (OFF)			
SW802	1-554-813-41	SWITCH, KEY BOARD (6)			
SW805	1-554-813-41	SWITCH, KEY BOARD (3)			
SW806	1-554-813-41	SWITCH, KEY BOARD (2)			
SW807	1-554-813-41	SWITCH, KEY BOARD (AM)			
SW808	1-554-813-41	SWITCH, KEY BOARD (SENS/LOUD)			
SW809	1-554-813-41	SWITCH, KEY BOARD (+ (SEEK/MANU))			
SW810	1-554-813-41	SWITCH, KEY BOARD (1)			
SW811	1-554-813-41	SWITCH, KEY BOARD (DSPL)			
SW812	1-554-813-41	SWITCH, KEY BOARD (FM/A.MEM)			
SW813	1-554-813-41	SWITCH, KEY BOARD (– (SEEK/MANU))			
SW814	1-554-813-41	SWITCH, KEY BOARD (+)			
SW815	1-554-813-41	SWITCH, KEY BOARD (SEL)			
SW816	1-554-813-41	SWITCH, KEY BOARD (–)			

****

Ref. No.	Part No.	Description			Remark
*	A-3294-158-A	MAIN BOARD, COMPLETE			
		**********			
*	3-937-533-01	BRACKET (IC)			
	7-621-773-95	SCREW +B 2.6X6			
		< CAPACITOR >			
C201	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C202	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C203	1-124-443-00	ELECT	100uF	20%	10V
C204	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C205	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C206	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C208	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C209	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C303	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C304	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C305	1-126-514-11	ELECT	22uF	20%	16V
C306	1-126-514-11	ELECT	22uF	20%	16V
C307	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C308	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C309	1-126-157-11	ELECT	10uF	20%	16V
C401	1-124-257-00	ELECT	2.2uF	20%	50V
C402	1-124-257-00	ELECT	2.2uF	20%	50V
C403	1-126-157-11	ELECT	10uF	20%	16V
C404	1-126-157-11	ELECT	10uF	20%	16V
C405	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C406	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C407	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C408	1-124-257-00	ELECT	2.2uF	20%	50V
C409	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C410	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C411	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C412	1-124-257-00	ELECT	2.2uF	20%	50V
C413	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C414	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C415	1-126-163-11	ELECT	4.7uF	20%	50V
C416	1-126-163-11	ELECT	4.7uF	20%	50V
C451	1-126-163-11	ELECT	4.7uF	20%	50V
C452	1-126-163-11	ELECT	4.7uF	20%	50V
C501	1-126-163-11	ELECT	4.7uF	20%	50V
C502	1-126-163-11	ELECT	4.7uF	20%	50V
C503	1-126-163-11	ELECT	4.7uF	20%	50V
C504	1-126-163-11	ELECT	4.7uF	20%	50V
C509	1-126-791-11	ELECT	10uF	20%	16V
C510	1-126-791-11	ELECT	10uF	20%	16V
C512	1-124-556-11	ELECT	2200uF	20%	16V
C529	1-126-163-11	ELECT	4.7uF	20%	50V
C541	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C542	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C601	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C602	1-125-701-11	DOUBLE LAYERS	0.047F		5.5V
C603	1-124-584-00	ELECT	100uF	20%	10V
C622	1-164-162-11	CERAMIC CHIP	100PF	5%	100V
C701	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C703	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C704	1-126-163-11	ELECT	4.7uF	20%	50V
C705	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C706	1-126-157-11	ELECT	10uF	20%	16V
C707	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C708	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C709	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C710	1-126-157-11	ELECT	10uF	20%	16V
C711	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C712	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C713	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C714	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< DIODE >			
D301	8-719-982-09	DIODE MTZJ-4.3			
D501	8-719-984-81	DIODE 1SR139-400			
D601	8-719-109-89	DIODE RD5.6ESB2			
D602	8-719-110-14	DIODE RD9.1ES-B3			
D604	8-719-110-08	DIODE RD8.2ES-B2			
D606	8-719-991-33	DIODE 1SS133T-77			
D607	8-719-061-04	DIODE 1SS145T-77			
D621	8-719-061-04	DIODE 1SS145T-77			
D622	8-719-061-05	DIODE 1N5401(N)			
D711	8-719-109-93	DIODE RD6.2ESB2			
D712	8-719-109-93	DIODE RD6.2ESB2			
D713	8-719-109-93	DIODE RD6.2ESB2			
D714	8-719-109-93	DIODE RD6.2ESB2			
D715	8-719-109-93	DIODE RD6.2ESB2			
D716	8-719-109-93	DIODE RD6.2ESB2			
D717	8-719-109-93	DIODE RD6.2ESB2			
D718	8-719-109-93	DIODE RD6.2ESB2			
D719	8-719-109-93	DIODE RD6.2ESB2			
D771	8-719-109-93	DIODE RD6.2ESB2			
		< TUNER >			
ET201	A-3291-810-A	TUNER ASSY			
		< VIBRATOR >			
F701	1-578-785-11	VIBRATOR, CRYSTAL (4.5MHz)			
		< FUSE >			
F901	1-533-330-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			

MAIN

SEE ADDITIONAL INFORMATION

Ref. No.	Part No.	Description	Remark
		< IC >	
IC301	8-759-106-02	IC uPC4570G2	
IC401	8-759-161-19	IC TDA7314S	
IC451	8-759-076-15	IC KIA4558P	
IC481	8-759-208-08	IC TC4052BPHB	
IC501	8-759-369-42	IC HA13153	
IC701	8-759-437-26	IC LC72356-9241	
		< COIL >	
L621	1-411-669-12	COIL, CHOKE	
L701	1-410-513-11	INDUCTOR 22uH	
		< CONNECTOR >	
* P301	1-506-993-11	PIN, CONNECTOR (PC BOARD) 11P	
P503	1-774-701-11	PIN, CONNECTOR 16P	
P701	1-764-422-11	PLUG, CONNECTOR 12P	
		< JACK >	
PJ502	1-778-536-11	JACK, PIN 2P (LINE OUT)	
		< TRANSISTOR >	
Q301	8-729-039-52	TRANSISTOR KTA1272OY-AT	
Q302	8-729-901-00	TRANSISTOR DTC124EK	
Q501	8-729-900-98	TRANSISTOR DTC143TK	
Q502	8-729-900-98	TRANSISTOR DTC143TK	
Q503	8-729-900-98	TRANSISTOR DTC143TK	
Q504	8-729-900-98	TRANSISTOR DTC143TK	
Q505	8-729-901-05	TRANSISTOR DTA124EK	
Q506	8-729-901-00	TRANSISTOR DTC124EK	
Q507	8-729-028-63	TRANSISTOR DTA115TKA-T146	
Q601	8-729-039-53	TRANSISTOR KTC3113B-AT	
Q602	8-729-039-83	TRANSISTOR 2SD1858-QR-TV2	
Q603	8-729-016-43	TRANSISTOR KTC3199Y-TP	
Q604	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q605	8-729-039-52	TRANSISTOR KTA1272OY-AT	
Q606	8-729-901-00	TRANSISTOR DTC124EK	
Q621	8-729-039-82	TRANSISTOR 2SB1326-QR-TV2	
Q622	8-729-901-00	TRANSISTOR DTC124EK	
Q701	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q702	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q771	8-729-901-05	TRANSISTOR DTA124EK	
Q772	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		< RESISTOR >	
R201	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R202	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R204	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R205	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R207	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R208	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R209	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R210	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R213	1-216-295-00	CONDUCTOR, CHIP (2012)	
R301	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R302	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R303	1-216-031-00	METAL CHIP 180 5% 1/10W	
R304	1-216-031-00	METAL CHIP 180 5% 1/10W	
R307	1-216-109-00	METAL CHIP 330K 5% 1/10W	
R308	1-216-109-00	METAL CHIP 330K 5% 1/10W	
R309	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R310	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R311	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R321	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R322	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R323	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R324	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R325	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R326	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R403	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R404	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R405	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R407	1-216-037-00	METAL CHIP 330 5% 1/10W	
R408	1-216-037-00	METAL CHIP 330 5% 1/10W	
R410	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R411	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R412	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R413	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R451	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R452	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R453	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R454	1-216-083-00	METAL CHIP 27K 5% 1/10W	
R481	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R482	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R493	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R494	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R501	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R502	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R503	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R504	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R505	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
R506	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R507	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R508	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R509	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R510	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
R511	1-216-073-00	METAL CHIP 10K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R512	1-216-081-00	METAL CHIP	22K	5%	1/10W
R513	1-216-081-00	METAL CHIP	22K	5%	1/10W
R514	1-216-073-00	METAL CHIP	10K	5%	1/10W
R523	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R524	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R541	1-216-113-00	METAL CHIP	470K	5%	1/10W
R542	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R543	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R544	1-216-113-00	METAL CHIP	470K	5%	1/10W
R545	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R601	1-216-025-00	METAL GLAZE	100	5%	1/10W
R602	1-216-085-00	METAL CHIP	33K	5%	1/10W
R603	1-216-041-00	METAL CHIP	470	5%	1/10W
R604	1-216-043-00	METAL GLAZE	560	5%	1/10W
R605	1-216-073-00	METAL CHIP	10K	5%	1/10W
R606	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R609	1-216-081-00	METAL CHIP	22K	5%	1/10W
R610	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R613	1-216-073-00	METAL CHIP	10K	5%	1/10W
R621	1-216-081-00	METAL CHIP	22K	5%	1/10W
R622	1-247-232-11	CARBON	470	5%	1/2W
R701	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R702	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R703	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R705	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R708	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R709	1-216-075-00	METAL CHIP	12K	5%	1/10W
R710	1-216-081-00	METAL CHIP	22K	5%	1/10W
R711	1-216-081-00	METAL CHIP	22K	5%	1/10W
R712	1-216-081-00	METAL CHIP	22K	5%	1/10W
R713	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R714	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R715	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R716	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R717	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R718	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R719	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R720	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R721	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R722	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R723	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R725	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R726	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R727	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R731	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R732	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R733	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R734	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R735	1-216-049-11	METAL GLAZE	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R736	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R737	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R738	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R739	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R740	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R771	1-216-073-00	METAL CHIP	10K	5%	1/10W
R777	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R778	1-216-097-00	METAL GLAZE	100K	5%	1/10W

< SWITCH >

SW702	1-762-459-11	SWITCH, SLIDE (FREQUENCY SELECT)
SW703	1-554-088-00	SWITCH, KEY BOARD (RESET)

< THERMISTOR >

TH621	1-809-148-11	THERMISTOR PTH8L07AR2R0M1B510

****

SWITCH BOARD
****

< RESISTOR >

R943	1-216-066-00	METAL CHIP	5.1K	5%	1/10W

< SWITCH >

SW903	1-554-813-41	SWITCH, KEY BOARD (5)
SW904	1-554-813-41	SWITCH, KEY BOARD (4)

****

MISCELLANEOUS
****

1	1-776-207-31	CORD (WITH CONNECTOR) (POWER)
F901	1-533-330-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A
HP701	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)
M701	X-3364-496-1	MOTOR ASSY (REEL/CAPSTAN)
S701	1-692-502-11	SWITCH, SLIDE (DIRECTION)
S702	1-692-065-11	SWITCH, LEAF (MUTE)
S703	1-554-790-21	SWITCH, POWER (TAPE DET)

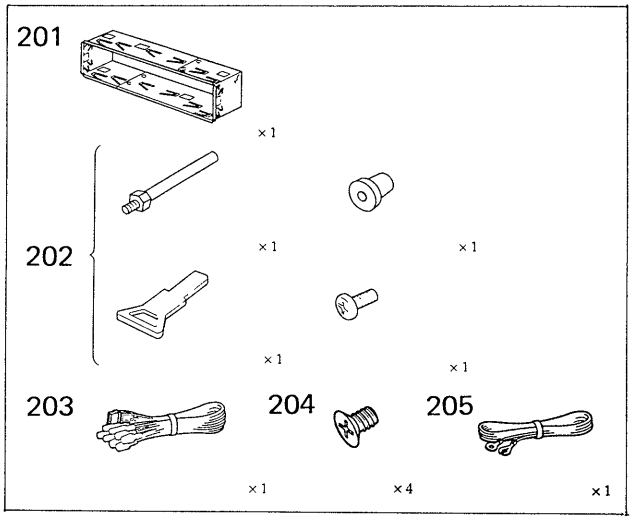
****

ACCESSORIES & PACKING MATERIALS
****

	3-858-021-31	MANUAL, INSTRUCTION (ENGLISH,SPANISH, CHINESE)
	3-858-022-31	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,CHINESE)
	X-3372-303-1	CASE ASSY

****

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-773-95	SCREW +B 2.6X6	
#2	7-621-775-10	SCREW +B 2.6X4	
#3	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S	
#4	7-621-775-08	SCREW +P 2.6X3	
#5	7-627-553-88	SCREW, PRECISION +P 2X7	
#6	7-621-255-15	SCREW +P 2X3	
#7	7-621-255-20	SCREW +P 2X4	
#8	7-621-255-25	SCREW +PTT 2X4 (S)	
#9	7-621-555-10	SCREW +K 2X3	
#10	7-621-591-00	SCREW +K 2X4	
#11	7-624-102-04	STOP RING 1.5, TYPE -E	
#12	7-624-104-04	STOP RING 2.0, TYPE -E	
#13	7-624-118-01	RING, RETAINING E-2.5	
**********			
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
201	X-3368-734-1	FRAME ASSY, FITTING	
202	X-3372-295-1	SCREW ASSY (J)	
203	1-776-207-31	CORD (WITH CONNECTOR) (POWER)	
204	7-682-560-04	SCREW +P 4X6	
205	1-575-616-21	CORD (WITH TERMINAL) (CHASSIS EARTH)	



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XR-3300

SONY

E Model
Australian Model

SERVICE MANUAL

CORRECTION-1

Correct your service manual as shown below.

☛ : indicates corrected portion.

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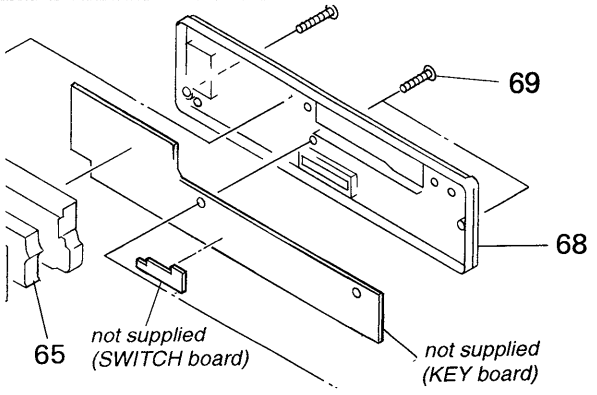

Ref. No. Part No. Description Remark
* 60 3-937-556-01 PLATE, LIGHT GUIDE
62 3-007-671-01 BUTTON (FM)
68 3-937-554-01 PANEL, FRONT BACK
70 ————————
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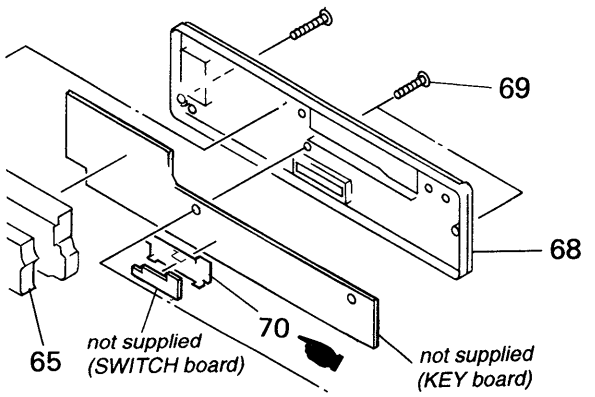

Part No. Description Remark
* 3-939-881-01 PLATE (BUTTON), LIGHT GUIDE
3-939-878-01 BUTTON (FM+AM)
3-939-882-01 PANEL, FRONT BACK
* 3-009-000-01 HOLDER (SWITCH PC BOARD)
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<tr><td>32</td><td>IC701 8-759-437-26 IC LC72356-9241</td><td>8-759-446-49 IC LC72356-9249</td></tr>
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Sony Corporation
Personal & Mobile Communication Company

9-923-598-91

96L0420-1D
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